

DOCUMENT RESUME

ED 075 633

VT 019 949

AUTHOR Thomas, Paul; Smith, W. O.
TITLE A Project to Demonstrate Making Vocational Education More Accessible to Persons in Rural Minnesota Through Cooperative Vocational Centers. Final Report.
INSTITUTION Minnesota State Dept. of Education, St. Paul. Div. of Vocational and Technical Education.
SPONS AGENCY Bureau of Adult, Vocational, and Technical Education (DHEW/OE), Washington, D.C.
BUREAU NO 0-361-0105
PUB DATE Dec 71
CONTRACT OEC-0-71-0653(361)
NOTE 143p.
EDRS PRICE MF-\$0.65 HC-\$6.58
DESCRIPTORS *Adult Vocational Education; *Area Vocational Schools; Cooperative Education; *Developmental Programs; Inplant Programs; Job Placement; Occupational Guidance; Program Evaluation; *Rural Schools; Secondary Grades; *Vocational Education
IDENTIFIERS *Minnesota

ABSTRACT

This document describes an exemplary project from October 1, 1970 through September 30, 1971 to expand vocational education to the youth and adults in rural Minnesota through the operation of vocational centers designed to serve all secondary schools in Roseau County and in South Central Minnesota. This was viewed as one project although conducted at two different sites. The centers provided vocational courses not available in the county schools to secondary students and also offered vocational courses and in-plant training for community adults. In addition, the centers sponsored a variety of other educational opportunities and vocational guidance efforts for both the students and the adults of the community. Despite problems of bussing, scheduling, and administrative cooperation, the evaluation indicated that most of the objectives of the project were accomplished. Success of the centers was credited to support from community, business, and educational agencies and to the centers' good public relations program. Recommendations for continuation and expansion of the centers and for the establishment of future centers are included. (MF)

FILMED FROM BEST AVAILABLE COPY

FINAL REPORT

Project No. 0-361-0105
Contract No. OEC-0-71-0653 (361)

ED 075633

A Project to Demonstrate Making Vocational Education
More Accessible to Persons in Rural Minnesota Through
Cooperative Vocational Centers

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

Robert P. Van Tries
Division of Vocational-Technical Education
Capitol Square Building
Saint Paul, Minnesota 55101

December 1971

VT019949

FINAL REPORT

Project No. 0-361-0105
Contract No. OEC-0-71-0653 (361)

A Project to Demonstrate Making Vocational Education
More Accessible to Persons in Rural Minnesota Through
Cooperative Vocational Centers

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

The project reported herein was performed pursuant to a grant with the Bureau of Adult, Vocational, and Technical Education, Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Robert P. Van Tries
Division of Vocational-Technical Education
Capitol Square Building
Saint Paul, Minnesota 55101

FOREWORD

This final report and evaluation was prepared by a team of two evaluators, Mr. Paul Thomas and Mr. W. O. "Dan" Smith, while they were EPDA Fellows at the University of Minnesota.

As the title implies, the project was designed to demonstrate the effectiveness of the Center concept as a means of making vocational education more accessible to persons in rural Minnesota. It should be noted that while this was viewed as one project it was conducted at two different sites. This type of operational setting was selected because of a number of factors unique to the state, but primarily because no single site would have provided information having maximum generalizability to the entire state. Consistent with that approach then, this report has been organized in two parts, reflecting the nature of the project at each of the sites involved. The appendixes contained therein are common to both parts.

Melvin E. Johnson, Director
Program Planning & Development
Vocational-Technical Education
Minnesota Department of Education

PART I

ROSEAU COUNTY VOCATIONAL CENTER

TABLE OF CONTENTS

	<u>Page</u>
Foreword	i
Table of Contents	ii & iii
List of Tables	iv & v
Summary of the Report	1
Time Period Covered by the Report	1
Goals and Objectives of the Project	1
Procedures	2
Results and Accomplishments	3
Evaluation	5
Conclusions and Recommendations	6
Body of the Report	10
Introduction	10
Problem Area Toward Which the Project Was Directed	11
Goals and Objectives of the Project	15
Center Organization	17
Origin of the Center	17
Calendar of Activities	18
Dissemination Activity	19
Advisory Committee	20
Center Personnel	23
Facilities	24
Transportation	25
Program and Operation	26
Enrollment	27
Costs	29
Formulation of Financial Plan	34
Instruction	35
Guidance and Follow-Up	36
Testing	37
Conferences and Orientation	38
Special Needs Areas	39
Preparation for Post-Center Experience	40
Placement	46
Follow-Up	46
Community Services	50

TABLE OF CONTENTS CONT.

	<u>Page</u>
Results and Accomplishments	53
Evaluation	55
Conclusions, Implications, and Recommendations for the Future	56
Enabling Factors	56
Limiting Factors	56
Recommendations	57
Recommendations for Future Centers	58
Program Continuation	60
Literature Cited	61
Appendix A (Succeeding Part II)	<i>i</i>
Appendix B (Succeeding Part II)	<i>ii</i>

LIST OF TABLES

<u>Table</u>		<u>Page</u>
I	Roseau County Secondary Enrollment and Vocational Outcomes	15
II	Roseau County Vocational Center Advisory Committee	20
III	Organizational Chart: Roseau County Vocational Center School	22
IV	Data on Center Personnel	23&24
V	Time and Distance Factors Involved in Transporting Member School Students	25
VI	Center Enrollment by Year and by School	27
VII	Percentage of Member School Eleventh and Twelfth Grade Participation in the Center Program, 1969-70	28
VIII	Percentage of Member School Eleventh and Twelfth Grade Participation in the Center Program, 1970-71	28
IX	Yearly Budget for Administrative Staff	30
X	Analysis of Center Program Enrollment and Program Cost (July 1, 1969-June 30, 1970)	30
XI	Center Cost by Program and by Catagory 1969-1970	31
XII	Analysis of Center Program Enrollment and Program Cost (July 1, 1970-June 30, 1971)	32
XIII	Center Cost by Program and by Catagory 1970-1971	33

LIST OF TABLES CONT.

<u>Table</u>		<u>Page</u>
XIV	Center Guidance Budget (1970-71)	33
XV	Center Enrollment by Program and by Sex	35
XVI	Number of Eleventh Grade Students Evaluated for Interests and Abilities	37
XVII	No. Students Enrolled Identified as SLD	39
XVIII	Occupations Represented by Visiting Resource Personnel	41
XIX	Visitors From Post-Secondary Education Institutions Speaking to Center Students (1969-1970)	42
XX	Visitors From Post-Secondary Education Institutions Speaking to Center Students (1970-1971)	43
XXI	Post-Secondary Vocational-Technical Schools Attended by Roseau Center Graduates	44
XXII	Follow Up of 1970 Center Graduates	47
XXIII	Follow Up of 1971 Center Graduates Attending From Roseau High School	48
XXIV	Follow Up of Roseau High School Student Bodies 1968-69, 1969-70, and 1970-71	49
XXV	Information of Adults Attending Center Vocational Courses	52

SUMMARY OF THE REPORT

This is the final report of an exemplary project conducted in the state of Minnesota. The project was designed to demonstrate how vocational education could be expanded and more efficiently extended to youth and adults in rural areas of the state.

Part D funds received from the U. S. Office of Education for this project amounted to \$111,101 and were applied to project operation during the period from October 1, 1970 through September 30, 1971. Funding was handled through the Minnesota State Board for Vocational Education, the applicant organization.

This report deals with the operation of the secondary vocational center established at Roseau, Minnesota. The Center is designed to serve all secondary schools in Roseau County.

The report is concerned with activity which occurred at the Roseau Center during the funding year, October 1, 1970 through September 30, 1971. Some data from the years immediately prior to and immediately following the project year is included in order to evaluate the Center's progress.

GOALS AND OBJECTIVES

Several objectives for the Center were specified in the proposal submitted to the U. S. Office of Education. From these, general goals and objectives can be drawn. The Center was established in order to:

1. Provide vocational education to at least 150 additional students from the member schools.
2. Expand vocational offerings by adding new courses that the single schools could not individually support.
3. Provide opportunity for more vocational education without eliminating previously established vocational courses.

4. Provide a multi-occupational cooperative education program.
5. Provide a curriculum which provides for a sequence of skills and related courses which will lead to employment related to training taken or to continued training on the post-secondary level.
6. Provide guidance which will provide proper direction to students attending the Center. This includes evaluation and testing of each student to determine his vocational and academic interests and abilities.
7. Provide a guidance program which will provide for placement of the Center graduate in a job related to his training or in a post-secondary training program. This also involves articulation of Center activity with post-secondary area vocational-technical schools which the students may elect to attend.
8. To allow Manpower representatives to have input in Center activity through participation on the Center's Advisory Council.
9. To allow Center personnel to participate in CAMPS planning and Center facilities to be used for Manpower programs.
10. To allow Center staff members to work closely with staffs of member schools in order that the vocational need of all students can best be served.

PROCEDURES

In order to accomplish the objective of demonstrating how vocational education can be expanded through use of secondary vocational centers, two exemplary programs were established in the State of Minnesota. One was located at Blue Earth, Minnesota and the other at Roseau, Minnesota. These centers were located in widely separated areas of the state so as to facilitate the efficiency and effectiveness of the demonstration to other schools in the state.

Of the \$111,101 in federal funds expended, \$63,177 went to the Blue Earth Center and \$47,924 went to the Roseau County Center. State and local funds expended on the project for the year covered by this report amounted to \$150,939. Of this figure, \$94,168 was used at Blue Earth and \$56,771 at Roseau.

RESULTS AND ACCOMPLISHMENTS

In reviewing the accomplishments of the Roseau County Vocational Center, one first notes a very successful attempt to develop a public relations and dissemination program. This program operated on local, regional, and state levels and enabled many other communities and school administrators to become acquainted with the Vocational Center concept.

Program accomplishments should be viewed in the perspective of program objectives. Specific accomplishments are:

1. The Center exceeded the proposed enrollment of 150 students during the project year. A total of 206 secondary students were enrolled, up from the previous year's enrollment of 149. The 206 students enrolled accounts for 38 percent of the eleventh and twelfth grade students enrolled in public secondary schools in Roseau County.
2. During the project year, the Center offered its students six vocational courses which were not available in any of the member schools.
3. For the adults of the community, the Center offered nine short term vocational courses, sponsored three in-plant upgrading and retraining courses, and offered related instruction for persons in the Electricians' Helpers Apprenticeship program.
4. Per pupil cost of operation of the Center decreased from \$583 during the year 1969-70 to \$482 during the project year.

5. All public secondary schools in Roseau County (there are four) are participants in the Center program. It should be noted that the quality of participation varies from school to school.
6. The Center has provided a broad community service to residents of the County. In addition to vocational course offerings, the Center has sponsored a variety of other educational opportunities for the adult community. Examples of these are a vocational, recreational, basic education, and college credit courses.
7. The Center's advisory committee does not have Manpower representatives in its membership but the Center has been very successful in gaining input from the industrial and business community through utilization of representatives from these areas on the advisory committee.
8. Thus far, the Center has not realized the goal of participating in Manpower programs or of participating in CAMPS meetings.
9. A major accomplishment is that many students in the member schools are now in class for a greater number of class hours each day. Where students had previously elected to take study hall, several are now taking a full day of classes, utilizing Center offerings as part of the class day.
10. The Center vastly improved its guidance function during the project year. This is largely due to the efforts of a full time guidance person employed by the Center in August of 1970. The Center has sponsored career days in addition to individual visits from representatives of both business and post-secondary institutions.

The guidance person has visited with the parents of almost all Center school students, explaining the program and the Center in general.

The Center has had a positive influence on the number

of students who are attending post-secondary vocational schools and has assisted students in enrolling in these institutions.

During the project year, a program of placement and follow-up was initiated. This program is progressing but still has room for improvement.

During the latter part of the project year, the Center established a Job Exploration program at Roseau for students who were potential dropouts. The major objective of the program is to lead these students to re-evaluate their concept of the school in hopes that they will continue their secondary education. This program was started too late in the year to adequately evaluate its impact upon the students it aims to serve but indications are that it is having a positive effect.

EVALUATION

The evaluation team feels that most of the objectives proposed for the Roseau Vocational Center were accomplished. This was true despite problems faced in the areas of busing, scheduling, and member school participation.

Much of the success of the Center must be attributed to the energy and enthusiasm with which the Center's administrative and guidance personnel pursue their task of promoting and increasing vocational education offerings. The evaluation team anticipates that this spirit of enthusiasm will assist the Center to overcome any problems it faces and that the Center will continue to expand its offerings to a larger number of students.

The main concern which the evaluation team has, relates to the participation of member schools in the Center's program. The healthy enrollment of the Center is somewhat clouded by the fact that a disproportionate majority of the students are from Roseau High School. It would be expected that Roseau High School would contribute a large number of students and the team encourages this but it must be noted that other member schools have not approached their potential

Center enrollment.

The problem of member school participation also relates to the effectiveness of the Center's guidance activity. In several instances, lack of coordination in this area led to difficulty of evaluation of the program because of lack of data from all member schools.

The objective of expanded vocational education for the students of Roseau County has been met but more remains to be accomplished. Additional course offerings will enable the Center to meet the vocational needs of even more students.

In looking at the total Center program and its accomplishments, the evaluation team detected some points which need to be strengthened but generally is of the opinion that the Center is providing the students of Roseau County the opportunity to receive quality vocational training which would not be available had the Center not been established.

CONCLUSIONS AND RECOMMENDATIONS

Enabling Factors:

Several factors enabled the Center to reach the level of accomplishment it has achieved to date. Some are more significant than others but they all played a role in assisting the Center to meet the needs of students in the county. Among the enabling factors are:

1. Cooperation given the Center by the Roseau Public Schools.
2. An excellent public relations program initiated by Center personnel.
3. Support by the Minnesota State Department of Education.
4. Support of the industrial and business institutions in Roseau County.

5. The funding of local, state, and federal enabled the Center to establish itself and its programs.

Limiting Factors:

Despite the overall success of the Center, limiting factors were at work which possibly hindered the accomplishment of all desired objectives. Among the limiting factors are:

1. Failure of all member schools to adequately utilize the Center.
2. An apparent limit to expansion of Center activity within the present facilities.
3. Failure of the Center personnel to have opportunity to explain the Center's program to all students in all member schools.
4. The expense and the time involved in transporting students from member schools to the Center.
5. The problem of arranging schedules so students from member schools can attend the Center.
6. Center enrollment is not yet large enough to offer the desired wide range of courses to the county's students.
7. The financial formula which determines member school responsibility for support of the Center on the basis of member school enrollment in the Center.

Recommendations:

The evaluation team would make the following recommendations regarding the Center's operation:

1. A change in the formula for local support of the Center. The present formula determines a member school's share of the Center's cost by determining the number of students from that school enrolled in

the Center. This may possibly lead to a negative view toward sending students to the Center since the greater number of students attending the Center, the greater the cost to the school. The evaluation team recommends that local district cost be determined by the percentage of the county's students, grades nine through twelve, which live in that district. The reasoning here is that the schools are more likely to utilize the Center if they have already paid a flat fee than if they have to pay for each individual student who attends the Center.

2. The Center administration needs to begin thinking seriously about expansion possibilities.
3. A system of exchange of information between the Center guidance office and the guidance office of each member school needs to be effected. This will necessitate a "county" approach to guidance instead of individual community or school approach.
4. A more efficient system of collecting and storing data, particularly placement, follow-up and adult education information.

Recommendations for Future Centers:

1. Planning should include conducting surveys, within potential participating schools, to determine the needs and choices of the students who will be served and to assure an adequate student base for operation of a Center.
2. Plan a system of record keeping so the Center will have access to participating school data but definitely have the Center maintain its own records. The Center records should be contained in the Center, not combined with those of another agency.
3. Planning should assure articulation between the Center and the area vocational-technical institutes where Center graduates are most likely to attend. This

should, among other things, be especially true in the areas of admissions and advanced standing.

4. Administrators of the various participating schools should be thoroughly oriented as to the goal of the Center and what the Center expects from the participating schools.
5. Funding for the Center, on the local level, should be based upon student enrollment in the member schools, not strictly upon enrollment in Center courses.
6. The planning process should be given sufficient time to adequately attend to the many details necessary for successful Center operation. Establishment of a Center should not be based upon the fact that funds are available if insufficient planning time has been allowed.
7. A very strong recommendation is that all centers have personnel who have a sole responsibility of attending to the guidance function. The number of guidance personnel should be adequate to accomplish the objectives stated in the proposal.
8. Follow-up of students should be a requirement of the Center. The follow-up procedure should be uniform throughout the state so that the state effort can be effectively evaluated as well as efforts of individual centers.
9. Definite plans should be made as to how to provide for the needs of all students, K-12. The first step now should be directed at the junior high and then efforts should be directed downward to the elementary school.
10. Planning should attempt to involve all community agencies and insure their support of the Center's activity.
11. More emphasis on the adult education program needs to be made, especially record keeping which will enable one to draw conclusions as to the adult community being served and what the needs of the adults are.

BODY OF THE REPORT

INTRODUCTION

This is a report on the evaluation of the Roseau County Vocational Center, Roseau, Minnesota. This is one of two vocational centers established in the state of Minnesota under the implementation of an exemplary project conducted by the Minnesota State Board for Vocational Education.

The project was funded by the U. S. Office of Education for the period beginning October 1, 1970 and ending September 30, 1971. Federal funding, in the form of Part D monies, amounted to \$111,101 dollars and this was matched by state and local funds amounting to \$150,939 dollars.

The direction of the evaluation was provided by a letter from the office of Albert J. Riendeau, Pilot and Demonstration Branch, U. S. Office of Education. Evaluations instructions were to:

- a. Determine the extent to which the objectives of the project have been accomplished.
- b. Determine what factors either enabled or precluded the accomplishment of those objectives.
- c. Describe the steps by which the grantee will promote the inclusion of the successful aspects of the project into vocational education programs supported with funds other than those provided by the grant.

The procedure followed by the evaluation team was as follows:

Having no specific guide to follow, the evaluation team consulted documents produced by persons involved in vocational program evaluation. Some helpful items were located but it became apparent that existing evaluation instruments did not sufficiently measure the achievement of the objectives of the project and that the team would have to devise its own instrument.

The team then reviewed the proposal submitted to the U. S. Office of Education, enumerating the specific objectives stated in the proposal. On the basis of these objectives, the questionnaire was constructed. Other questions were added in order to answer points b and c of the guidelines for evaluation as listed above.

After having constructed the questionnaire, the team sent a copy to the director of each program being evaluated, requesting that the needed information be collected and recorded. Arrangements were made for the evaluation team to visit each vocational center after sufficient time had been allowed for collection of the data requested. On the day of the visit, a tour of the Center was conducted and the remainder of the day was spent in going over the data collected, clarifying the responses given to the questionnaire. In some cases, it was necessary for the respondent to collect additional data to be sent to the team. In a few cases, it was found that the data asked for was not available.

After collecting the data, the evaluation team then reviewed the material submitted and arrived at conclusions which should be included in the report.

PROBLEM AREA TOWARD WHICH THE PROJECT WAS DIRECTED

The Roseau County Vocational Center was developed to meet the needs of people in its member school districts and to demonstrate the feasibility of inter-district cooperation as a method of organization for vocational education in Minnesota. Impetus for its formation came from both local and state levels of education.

At the state level, interviews with members of the Division of Vocational-Technical Education, Minnesota State Department of Education revealed three major factors which stimulated the genesis of the secondary vocational center concept in Minnesota. These factors were the provisions of Minnesota Statute 471.59, the results of three major research studies sponsored by the Minnesota State Department of Education, and the subsequent administration action by the Minnesota State Board of Education.

Minnesota Statute 471.59 is referred to as the Joint Powers Act (1). This act, although not specific to education, allows school districts to do anything jointly that they may do separately. Therefore, inter-district cooperation, as necessary for the contemplated secondary vocational centers, was a legal activity.

Three major research studies were identified by State Department personnel as important stimulants to secondary vocational center concept development. The reason cited for their identification was that they provided explicit documentation of the need for increased availability of vocational education and the potential of inter-district cooperation as a practical means of meeting this need.

In chronological order, the first study was completed in 1967 by Domian and Olson (2). Their findings indicate "over two-thirds of the districts (in Minnesota) enroll fewer than 500 secondary students (grades 7-12) but the combined enrollment of these schools is less than one-fourth of the total state enrollment" (p. 73). They found a "clear (positive) association between size of a districts' secondary enrollment and the number of courses offered in its secondary grades" (p. 75). For them, these facts implied "where a student happens to reside within the state governs considerably the extent of variation in educational opportunities available to him" (p. 77). Specific investigation of secondary vocational education indicated "nearly one-fourth of the districts in the smallest size category (under 150 students) have no approved (vocational) departments" and "ten percent of all districts with secondary schools enrolling fewer than 300 students have two or fewer special (vocational) departments" (p. 87).

In 1968, Kodet, et al (3) completed a study of the role and function of secondary vocational education in Minnesota. A questionnaire was sent to administrators of all secondary schools. Their findings are based on 417 responses or a 92 percent sample.

The factors which school administrators listed as

limitations to effective vocational education in Minnesota schools were (p. 40):

- a. Lack of finance, 138 schools
- b. Insufficient school size and lack of space, 134 schools
- c. Low enrollment and pupil interest, 84 schools
- d. Inadequate staff, 77 schools

One of their recommendations aimed at reducing the effect of these limitations was "secondary vocational centers should be established to provide maximum opportunities in vocational education for Minnesota's high school students at a reasonable cost and close enough to the student's home so that he might take advantage of the opportunity without undue sacrifice" (p. 89).

Kodet, et al compiled a proposed list of 100 vocational centers for Minnesota, however, they recommended that schools districts not be assigned to centers because "economic, social, and ethnic conditions which are unknown to the author of this study would have negative effects on the objective consideration of cooperative effort among districts" (p. 89).

The third study contributing to the development of the secondary vocational center concept in Minnesota was completed in June of 1969 by Miles, et al (4). Their study focused on identifying educational needs in Minnesota and methods of meeting these needs through innovative and exemplary programs. The vocational education section of the study was written by A. E. Pagliarini.

Pagliarini surveyed all superintendents of school districts in Minnesota that maintained a secondary school. Using a questionnaire, the superintendents were asked to identify critical vocational education needs in their districts and indicate which actions might alleviate these needs. His findings are based on 414 returns or a 84.1 percent sample.

Superintendents were grouped on the basis of their school districts location in relationship to the educational planning areas of the State. The major needs identified were to make vocational education more relevant to the world of work and to increase the opportunity for student participation in vocational programs.

In answer to actions which might alleviate these needs, "two-thirds of the respondents indicated that the need for vocational education in their communities was at the secondary level" (p. 148). "Between 66 and 72 percent of the superintendents in most of the areas believed that new, innovative approaches must be initiated before vocational education needs could be met" and "eighty-four percent of those feeling that innovative approaches must be initiated also believe that these new programs should be undertaken on an inter-district basis" (p. 148).

The recommendation of Kodet, et al concerning secondary vocational centers, supported by the findings of Domian, et al and Miles, et al was accepted by the Minnesota State Board of Education in January of 1969. This acceptance marked the explicit origin of the secondary vocational center concept as a part of Minnesota's vocational education program.

The figures for the Roseau County Schools illustrates the need as indicated above. Table I indicates the need of the secondary population for increased vocational education by identifying the target population, the portion of that population currently being served, and the degree to which the project was designed to meet the need.

TABLE I
Roseau County Secondary Enrollment
and Vocational Outcomes

Total Enrollment, Grades 7-12.	1359
Total Enrollment, Grades 11-12	.510
Target for Vocational Education Job Proficiency Training	.255
Output of Current Programs	75
Percent of Need Being Met.	29.4
Additional Students to be Served by Program	.150
Total Percent of Need to be Met by Current and Proposed Programs	88.6

GOALS AND OBJECTIVES OF THE PROJECT

The purpose of this exemplary project, as stated in the proposal submitted to the U. S. Office of Education, was to demonstrate a means of expanding vocational education by establishing vocational education centers in two widely separated locations in the state. These vocational education centers were to serve the needs of students and adults from the surrounding area, drawing enrollment from several member school districts.

Several individual program goals were specified in the proposal. From these specific goals, the following general goals were evolved. The Center, in each case, was established with the objectives of:

1. Providing vocational education to at least 150 students in addition to those students already being served by existing vocational programs.
2. Expanding vocational offerings by adding new courses that the member schools could not individually support.

3. Providing opportunity for more vocational education without eliminating previously established vocational courses.
4. Providing a multi-occupational cooperative education program.
5. Providing a curriculum which provides for a sequence of skills and related courses which will lead to employment related to training or to continued training on the post-secondary level.
6. Providing guidance which will provide proper direction to students attending the Center. This includes evaluation and testing of each student to determine his vocational and academic interests and abilities.
7. Providing a guidance program which will provide for placement of the Center graduate in a job related to training or in a post-secondary training program. This also includes articulation of Center activity with post-secondary schools which the graduate may choose to attend.
8. Allowing Manpower representatives to have input in Center planning through membership on the Center's Advisory Committee.
9. Providing a facility for conducting Manpower programs and personnel and facilities for CAMPS planning.
10. Providing a common agency through which member schools can work for improvement of vocational education. The Center staff members are to provide for articulation with member schools so the vocational education needs of the area's students and adults can be best served.

DESCRIPTION OF THE GENERAL PROJECT DESIGN AND PROCEDURES
FOLLOWED, INCLUDING INFORMATION ON STUDENT POPULATION,
INSTRUCTIONAL STAFF, AND ON THE METHODS, MATERIALS, AND
TECHNIQUES USED

Origin of the Center

In October of 1968, Joe Freeman met with Harold Murphy of the Program Planning & Development Section of the Minnesota State Department of Education. Mr. Murphy explained the Center school concept to Mr. Freeman. Mr. Freeman approached the administration of the Roseau Public schools, explaining the Center concept, and was given permission to bring the proposal to the Roseau Board of Education on November 8, 1968.

The Roseau Board of Education passed a resolution to support the proposal and on December 19, 1968, a meeting with the four superintendents from Badger, Greenbush, Roseau, and Warroad was held. Mr. Murphy was present and explained the Center concept to these men, proposing that a Center be established in Roseau County.

On the following day, meetings were held with representatives of Polaris and Marvin Industries and the supplementary adult vocational education aspect of the Center was explained.

Following these meetings, the proposed program was publicized in the local news media, meetings were held with civic and commercial organizations, as well as with the faculties of each school. Letters expressing opinions about the proposal were requested. One hundred and thirty were received, all in support of the proposal.

A survey of student interest was conducted and was based upon the established needs of business and industry in Roseau County. The survey contained 24 occupational choices. Tabulation was based on the interests of 10th and 11th grade students.

The four boards of education for the Roseau County schools then signed formal agreements of intent to parti-

cipate in the Center. A formula for the financial participation of each school was proposed and adopted.

Using the survey as a basis for planning, Mr. Freeman drew up a budget, staffing proposals, organizational procedures, and began to determine school schedules.

The Roseau County Vocational Center began its first year of operation in September, 1969.

General Information

The following information is based upon data submitted by the Roseau County Vocational Center program director.

- A. Calender of activities: Major events which occurred during the project year.

January-February, 1971

1. Organized a work exploration program for the Roseau School
2. Met with four local program directors and four area technical directors to organize a plan where Center school students can receive credit for courses that they specialize in when they transfer to an area technical school and take the same type of course.

March-April, 1971

1. Spent a great deal of time interviewing instructors for courses that are to be taught at the Vocational Center during the 1971-1972 school year.
2. Spent a great deal of time with sales personnel making sure we got our dollar's worth of equipment.
3. Worked with Northwest Community Action on GED (personnel for the course).

May-June, 1971

1. Purchased equipment for the proposed courses and present courses not in operation.
2. Attended several meetings, the Governor's Conference and meetings at four different technical schools. Gained some ideas on improvement of Center.
3. Made a tour of all vocational schools in Winnepeg, Manitoba in order to get new ideas.
4. Attended Program Director's meetings.

July-September, 1971

1. Went before the State Board of Education and submitted budget for the 1971-72 school year. Three superintendents attended this meeting with me.
2. Attended three day workshops at Quadna Mt. Lodge.
3. Finalized equipment for the coming school year.
4. Finished hiring instructors for all vocational Center programs.
5. 100% attendance at Bemidji Vocational Conference.
6. Encouraged instructors to attend workshops for self improvement and for accreditation.
7. Gave several talks to school personnel interested in starting up a center.
8. In addition to the above activity, Mr. Elder Larson, Superintendent of the Roseau Public Schools presented a comprehensive report on the Center to the Minnesota State School Boards Association in January of 1971.

B. Dissemination Activity

The Center has been very successful in making others

aware of the activity it is engaged in. Very good use has been made of all forms of news media. Newspaper coverage has been good and the type of information released has been well balanced, ranging from information about specific courses and the Center program to human interest stories about instructors at the Center. Other forms of dissemination have been, use of radio and television, programs presented to civic and professional groups (on local, regional, and state levels), county wide open house, and use of a Career Day for students who are potential and current students of the Center. One final form of dissemination is the "open door" policy to visitors who are interested in learning more about the Center's activity. A unique form of dissemination has been the use of the video-tape monitor mounted in the bus that is used to transport students from one school to another. This bus was recently used to present a program to a civic organization as the group was transported from one meeting location to another.

C. Advisory Committee

The advisory committee of the Roseau County Vocational Center is as follows:

TABLE II

Roseau County Vocational Center Advisory Committee

<u>NAME</u>	<u>POSITION</u>	<u>DURATION OF MEMBERSHIP</u>
Duane Fausher	Personnel Mgr., Marvin Industries	3 Years
Martha Frolander	Editor, Warroad Pioneer	3 Years
Mrs. Ted Magnan	Housewife	3 Years
Mrs. Allen Linder	Housewife	3 Years
Norrell Erickson	Business Mgr., REA	3 Years
Mrs. Robert Brinkman	Housewife, Former teacher	3 Years
Ray young	Journalist, Times Region	3 Years
Mrs. Marlin Erickson	Housewife	3 Years
Mrs. Larry Hilliard	Director, NWCA, Badger	3 Years
Belmer Thompson	Manager, Chevrolet Garage	3 Years
Mrs. Stanley Evans	Editor, Greenbush Tribune	3 Years
Brian Daily	District Forester	3 Years
Mrs. Gust Nordvall	Housewife	3 Years
Les Lockhart	Editor, Badger Enterprises	3 Years
Mrs. Edwin Haaland	Secretary, Progressive Tool Co.	3 Years
Wayne Swisher	Dept. Head, Polaris Industries	3 Years
John Trangsrud	Manager, Bulk and Gas Station	3 Years

In addition to the advisory committee which was established for the Center, each individual vocational program has its own advisory committee. These program committees were established by the instructor of each respective program. The advisory committees, both for the Center and for the individual programs meet as the need arises. During 1969-1970 the Center's Advisory Committee met twelve times. During 1970-1971, the Committee met 17 times.

Table III presents the organizational structure of the Center and illustrates how the Advisory Committee relates to the overall organization.

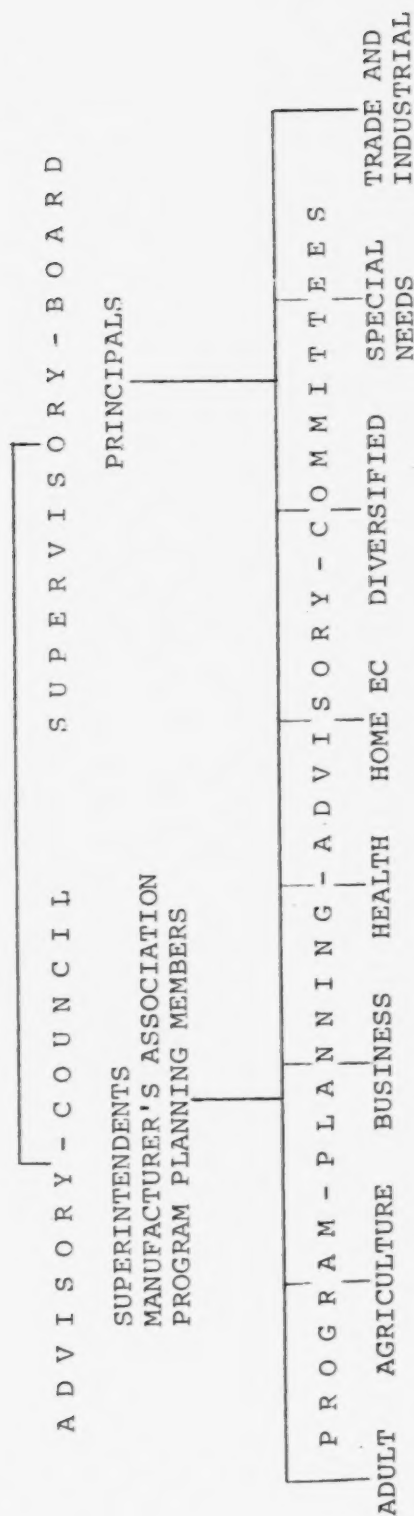
TABLE III

ORGANIZATIONAL CHART

ROSEAU COUNTY VOCATIONAL CENTER SCHOOL

EXECUTIVE - BOARD

SUPERINTENDENTS



These committees are composed of teachers and concerned citizens who are conversant in the area in which they serve.

D. Center Personnel

The following table identifies the characteristics of Center personnel in terms of work experience, teaching experience including that after accepting employment with the Center, highest level of educational achievement, percentage of work day employed by the Center, and the date of joining the Center staff.

TABLE IV
Data on Center Personnel

Instructors By Program	Years Work Exp.	Years Teaching Exp.	Highest Educ. Level	Percentage Time Employed	Date Joined Staff
<u>Carpentry</u>					
(1)	8	0	-	100 (2 hr. block)	9/70
(2)	29	0	8th	33	8/71
<u>Distributive Education</u>					
(1)	20	1	BA	100	8/69
<u>Food Service</u>					
(1)	8	0	HS Diploma	100	9/70
<u>Machines Shop</u>					
(1)	5 1/2	0	12 HS 2 yrs. Voc.	100	6/71
<u>Personal Service</u>					
(1)	-	3	BS	100	8/70
<u>Small Engines</u>					
(1)	12	1	HS	100	10/69
(2)	20	0	HS	100 (2 hr. block)	8/70

TABLE IV CONT.

Data on Center Personnel

Instructors By Program	Years Work Exp.	Years Teaching Exp.	Highest Educ. Level	Percentage Time Employed	Date Joined Staff
<u>Special Needs</u>					
(1)	$\frac{1}{2}$	$\frac{1}{2}$	BS	100	1/71
(2) (Secy)	$1\frac{1}{2}$	0	HS	100	1/71
<u>Welding</u>					
(1)	4	1	HS	100 (2 hr. block)	1/71
<u>Additional Staff</u>					
<u>Director</u>	7	9	BS	100	8/70
<u>Guidance</u>	3	6	MA	100	8/70
<u>Adm. Asst.</u>	12	-	12	100	7/71

In addition to the staff and instructors listed in Table IV, the Center employed two consultants for a period of 62 hours each. These consultants were employed during the month of October, 1970. One person was employed as a consultant in the Food Service program. She had seven years experience in the field, no teaching experience, and had earned the BA degree. The other individual was employed as a consultant for the Personal Services program. She had nine years work experience, no teaching experience, and had earned a Nursing diploma.

E. Facilities

The Roseau County Vocational Center is housed primarily in a portion of the Roseau, Minnesota high school. Upon organization of the Center, the decision was made to utilize facilities in the member schools. In keeping with this decision, classes were conducted in the member schools as

well as in the Center during the first year. During the year the proposal funds were used, the executive board decided to bus students to the facility at Roseau for the majority of the courses. In the future, courses other than Distributive Education will be conducted at the member schools only if those schools have the facilities and an instructor can be hired. Adult courses are still offered in the member schools as the demand requires.

There is evidence of much activity in preparing the Roseau facility to handle the increasing number of students who desire vocational education. Several partitions have been placed in larger rooms to provide more classroom space and a general upgrading of equipment in the shops is evident. Local industry has been generous in providing equipment, mainly motors, etc. upon which the students can practice their newly acquired skills.

It should be noted that the proposal for the exemplary project did not budget Part D funds to be used for rent, utilities, or maintenance at the Roseau facility. The Blue Earth facility was budgeted, \$14,150 in federal monies, for this purpose. On the other hand, the Roseau Center did receive \$15,000 for student transportation as contrasted to \$9,500 for the Blue Earth Center. Since transportation is a major consideration of the Roseau Center, information regarding distance and busing time is appropriate.

F. Transportation

TABLE V

Time and Distance Factors Involved
in Transporting Member School Students

<u>Trip</u>	<u>Distance Traveled (in miles)</u>	<u>Time Required (one way)</u>
Warroad to Center	20 miles	30 minutes
Greenbush to Center	22 miles	33 minutes
Badger to Center	12 miles	18 minutes
Badger to Greenbush	10 miles	15 minutes

Due to the distance from Greenbush and Badger to Warroad, it is not likely that students will be transported from either of those two schools to Warroad. During 1970-71 the only transportation of students other than between member schools and the Center was between Badger and Greenbush for a Small Engines course. The Distributive Education coordinator travels to all the communities so the students may be placed in their own community.

G. Program and Operation

During the project year, the Roseau County Vocational Center provided occupational training to 206 high school students from the four Roseau County high schools. In addition, the Center provided several types of vocational training to over 150 adults.

Prior to the establishment of the Center, the four member schools were offering courses in Agriculture, Home Economics, Business Education, and Industrial Arts. As a result of the Center's program, students are now able to take courses in the areas of Trade and Industrial Education, Occupational Home Economics, and Distributive Education.

The Center has assumed several roles in meeting the needs of the county's residents. In addition to the vocational courses offered the secondary students, thirty-one vocational and academic courses have been offered the adult population. The non-vocational courses have taken several forms, ranging from Adult Basic Education courses and courses leading to the High School Equivalency Certificate to courses taught and accredited by Bemidji State College. The main core of vocational courses offered the adults of the county are short term courses, consisting of ten meetings of two to three hours each in length. The objective of these courses is generally retraining, upgrading, or new skill acquisition.

Another phase of adult training is in-plant upgrading and retraining. These are longer courses, up to 400 hours in length and are conducted in local industries. The offerings thus far have been in Basic Machinist and in Drafting and Blueprint Reading.

Apprenticeship related instruction is also offered for

apprentice Electrician's Helpers. The Center provides the 144 hours of related instruction required of each apprentice.

Adults are also provided the opportunity to enroll for recreational and vocational courses. Courses are taught in any of the four member schools where there is sufficient enrollment and an instructor can be hired.

Thus far, no significant attempts have been made to provide for articulation between the elementary, junior high and secondary levels. The main attempt in this area has been to offer Industrial Arts to ninth grade students. Some progress has been made in informing junior high students of the Center program but much remains to be achieved here.

The main thrust of the Center thus far has been to establish its secondary and adult program. This has been done with the intention of attending to other objectives once the secondary and adult programs are strongly established.

G 1. Enrollment

Enrollment figures for the Center indicate that participation in the Center program is increasing each year. Table VI indicates this increase in enrollment each year and does include summer enrollment. This is for all courses conducted under the direction of the Center, some being conducted in member schools.

TABLE VI

Center Enrollment by Year and By School

<u>Member School</u>	<u>Enrollment 1969-70</u>	<u>Enrollment 1970-71</u>	<u>Enrollment 1971-72</u>
Badger	21	8	11
Greenbush	27	16	24
Roseau	84	176	236
Warroad	17	6	26
	<u>149</u>	<u>206</u>	<u>297</u>

Table VII and Table VIII relates the figures in Table VI to eleventh and twelfth grade enrollment in each school.

TABLE VII

Percentage of Member School Eleventh and Twelfth Grade
Participation in the Center Program, 1969-70

Member School	Enrollment		Total	Enrolled In Center	Number of Programs	Percentage of Total Number
	Gr.11	Gr.12				
Badger	26	20	46	21	3	48
Greenbush	51	--	51	27	3	53
Roseau	125	113	238	84	4	34
Warroad	50	62	112	17	2	15
			<u>447</u>	<u>149</u>		

This indicates that 33.1 percent of the county's 11th and 12th graders received vocational education at the Center during 1969-1970.

TABLE VIII

Percentage of Member School Eleventh and Twelfth Grade
Participation in the Center Program, 1970-71

Member School	Enrollment		Total	Enrolled In Center	Number of Programs	Percentage of Total Number
	Gr.11	Gr.12				
Badger	20	23	43	8	2	18
Greenbush	59	46	105	16	1	15
Roseau	136	122	258	163	5	63
Warroad	61	44	105	6	1	6
			<u>511</u>	<u>193*</u>		

*This figure is not the same as the figure given in Table VI since Table VI includes some tenth grade students.

This table indicates that 38 percent of the county's eleventh and twelfth grade students received vocational education at the Center in 1970-1971.

Data contained in the three preceding tables indicate that the Center is increasing its vocational offerings and is gaining in enrollment. The data also indicates that Roseau High School has utilized the Center to a great extent while other member schools have actually experienced a decline in Center enrollment. Enrollment from the other member schools was up again in 1971-72 (61), almost to the figure for 1969-70 (65).

The adjustment of meeting the Center's decision to conduct almost all classes within the Center facility perhaps accounts for the decline in enrollment from some of the member schools.

The evaluation team did notice and have some concern about the apparent imbalance in member school usage of the Center. This is in no way meant to criticize the extent to which Roseau High School is utilizing the Center. Rather it is a concern that other member schools be encouraged to participate more fully in what was designed to be a cooperative effort in the interest of providing greater vocational education opportunity to all students in Roseau County.

G 2. Costs

The following information on Center expenses was submitted by Center personnel. The questionnaire indicated that the sum of costs over all programs should yield the total cost of operating the Center. Program costs were to reflect their share of the overall expense of supplies, travel, salaries, utilities, rent, ancillary services, and equipment. Equipment costs were to be depreciated over an appropriate period of time.

TABLE IX
Yearly Budget for Administrative Staff

<u>Position or Item</u>	<u>Cost</u>
Vocational Director (12 months)	\$14,000
Travel Allowance	3,600
Secretary (12 months)	5,000
Office Supplies and Equipment	675
Total Yearly Cost of Administration	\$23,275

Tables X and XI present data on program costs for the year 1969-70.

TABLE X
Analysis of Center Program Enrollment and Program Cost
(July 1, 1969-June 30, 1970)

<u>Program</u>	<u>No. Sections</u>	<u>No. of Sessions/Section (weekly)</u>	<u>No. of Hrs/Session</u>	<u>No. Students In Program</u>	<u>Cost</u>
Carpentry	1	five sessions	two	11 (8%)	7,770
Distributive Education	4	five sessions four sections	two	21 (15%)	16,655
Personal Services	3	five sessions	two	52 (34%)	28,089
Small Engines	3	five sessions	two	65 (43%)	34,831
				<u>150</u>	

TABLE XI

Center Cost by Program and by Category 1969-1970

Cost Category	Carpentry	Distributive Education	Personal Services	Small Engines	Total
Salaries	4,179	8,844	11,975	9,729	\$34,727
Supplies	291	151	1,713	2,799	4,954
Travel	-----	1,260	651	2,703	4,614
Rent of Facilities					
Utilities Inc.	100	400	1,500	3,000	5,000
Depreciation (equipment)	700	1,200	1,550	3,200	6,650
Administration Expenses (85%)	1,500	3,000	6,700	8,400	19,600
Guidance	1,000	1,800	4,000	5,000	11,800
Total Cost	7,770	16,655	28,089	34,831	87,345
Cost per Pupil	706	757	540	536	

Center cost per pupil: \$87,345 divided by 150 students
= \$582.00.

Tables XII and XIII present data on Center program costs for the project year, 1970-1971.

TABLE XII

Analysis of Center Program Enrollment and Program Cost
(July 1, 1970-June 30, 1971)

Program	Number Sections	Sessions per Section	Hrs. per Session	No. Students in Program	Cost
Carpentry (17.1001)	1	five	two	27 (14%)	9,674
Small Engines (17.3100)	4	five	two	81 (40%)	38,328
Personal Services (17.26)	1	five	two	10 (5%)	9,358
Occupational Foods (17.2900)	1	five	two	23 (12%)	9,670
Distributive Education (04.00)	3	five	two	52 (21%)	21,229
Welding (one sem.)	1	five	two	13 (7%)	6,189

TABLE XIII

Center Cost by Program and by Category
(1970-1971)

	Carp.	Dist. Educ.	Per. Ser.	Sm. Eng.	Occ. Food	Weld.	Total
Salaries	4,118	10,572	4,072	15,717	3,946	1,969	\$40,394
Supplies	256	756	735	2,567	372	1,420	6,106
Travel		1,801	851	844	552		4,048
Rent of Facilities (include utilities)	100	400	600	3,000	1,000	500	5,600
Equipment Depreciation	900	1,200	1,500	3,400	100	100	7,200
Administrative Expense	2,700	4,100	1,000	8,000	2,300	1,400	19,500
Guidance	1,600	2,400	600	4,800	1,400	800	11,600
Total Cost	9,674	21,229	9,358	38,328	9,670	6,189	94,448
Cost per Pupil	358	408	936	473	420	476	482

TABLE XIV

Center Guidance Budget (1970-71)

High School Program	(12 months)	\$7,500
Adult Program	(12 months)	2,500
Travel Allowance		1,200
Testing Materials		460
Supplies		300
Equipment		380
Total Departmental Yearly Budget		\$12,340
Capital Outlay: Desk, Chairs, Tables, Files		550

The figures submitted by the Center personnel indicate that the Center's financial operation is becoming more efficient, as reflected in per pupil cost figures for both individual programs and for the Center as a whole. As enrollments increase, this per pupil cost should continue to decrease until the need arises for substantial investment in new equipment or for addition of new facilities.

Formulation of Financial Plan

Each participating school shares in the cost for the Vocational Center School on the basis of the following formula: $(\text{Foundation Aid} \times 1.5) \times 2/7 = \text{Per Pupil Share}$; $\text{Per Pupil Share} \times \text{Number of Students Enrolled from School} = \text{School Share of Center Costs}$; The budget is proposed by the director and approved by the executive board; The financial transactions are handled by the Center School Director.

The evaluation team is of the opinion that the financial support structure, as it now is designed, does not adequately encourage all member schools to utilize the Center's vocational offerings. This will be addressed more fully in the recommendations of the evaluation team.

H. Instruction

The following table presents enrollment, by sex, of all secondary courses offered under the direction of the Roseau Center.

TABLE XV
Center Enrollment by Program and by Sex

Course	Grade Level	1969-1970		1970-1971		1971-1972	
		M	F	M	F	M	F
Carpentry	11, 12	11	0	27	0	37	0
Small Engines	11, 12	65	0	81	0	78	0
Distributive Education	12	12	9	18	34	16	15
Occupational Foods	11, 12	--	--	22	1	10	0
Personal Services	11 (70-71) 11, 12	0	52	0	10	0	40
Welding	10, 11, 12	--	--	13	0	43	0
Electronics	11, 12	--	--	--	--	29	0
Machine Shop	11, 12	--	--	--	--	29	0
TOTAL		88	61	161	45	242	55

The table indicates that the Center has expanded its offerings each year. Beginning with four courses during the first year, 1969-1970, the Center expanded its offerings to six courses during the project year and to eight courses for the year 1971-1972. This trend is in keeping with the intent of the Center, as specified by the proposal, to offer more course offerings to students in the County who are interested in vocational education. Again, the evaluation team expresses concern that several of the member schools are not utilizing the Center as fully as was anticipated.

One new course that was offered through the Roseau Public School System to Roseau students during the project year was the Work Exploration Program. This program was

conducted with funding separate than that provided the Vocational Center but the Center director and guidance person had significant input into the development of the course. The course was in existence only during the last twelve weeks of the 1970-1971 school year so the results of the course are difficult to determine. Its main purpose is to provide a means to lead certain disinterested students to a new interest in the school program. This renewed interest was to hopefully be achieved through placing students in jobs so they could see the need for more education and generally see the school as providing an experience for them that is relevant to their perceived needs. Results of this project thus far indicate substantial improvement of the attendance record of the students during the time they were in the work exploration program. Of the ten students involved in the course, 109 total absences were registered for the entire school year. Of the 109 absences, 94.5 were registered during the 24 weeks prior to the students entering the course.

This would be an average of 47.2 absences for each of the first two twelve week periods of the school year. During the last twelve weeks, the students registered only 14.5 absences, a reduction of 32.7 absences from the earlier average. This amounts in a reduction in absences of about 69 percent.

I. Guidance and Follow Up

The proposal had several points which the evaluation team considered to be under the heading of guidance. This section of the report will address each of these points. The efforts at the Roseau Center are to be commended, although, as is always the case, more can and should be accomplished. The Center did not have a guidance person in its employ during its first year of existence but did employ the present guidance director during August of 1970. As a result of not having a person solely responsible for the guidance function during the first year of operation, the Center has little data upon which to evaluate its activity. Data provided by the Center does indicate that the guidance efforts of the Center have vastly improved and that much is being done in this area. According to Center personnel, a major thrust of the program is directed toward disadvantaged students.

I 1. Testing

One statement provided by the Center personnel states, "Each student will be thoroughly evaluated and tested for his Vocational and Academic aptitudes and abilities. He will be counseled in such a way as to make full use of his potential for his own betterment in school and out of school."

The following information indicates the effort of the Center to utilize testing to achieve the stated goal.

Instruments used to assess interest: Kuder Preference Test
Strong
Minnesota Vocational
Interest Inventory
(The MVII to be used
beginning 1971-72)

Instruments used to assess ability: General Aptitude Test
Battery

TABLE XVI

Number of Eleventh Grade Students Evaluated
for Interests and Abilities

<u>School</u>	No. Students Tested for Interest		No. Students Tested for Ability	
	<u>1969-70</u>	<u>1970-71</u>	<u>1969-70</u>	<u>1970-71</u>
Warroad	(Kuder given, 43 records not available)	120	17	43
Roseau		6	72	28
Badger		32	6	0
Greenbush			32	0

As indicated by the above figures, the Center did a much better job of testing during the proposal year than it did prior to that year (except in ability testing). More remains to be done in this area. The figures above indicate that of the 276 11th graders enrolled in the member schools,

during the proposal year, 83 percent were tested for interest but only 25 percent were tested for aptitude.

I 2. Conferences and Orientation

The proposal specifies that the guidance function of the Center will include conferences between the staff and the student and also between the staff, the student, and the parents of the student. The Roseau Center has attempted to achieve these objectives and has done a commendable job in doing so during the proposal year. During the year 1969-70, no records of this kind of activity were available. During the proposal year of 1970-71, records indicate that the Center's guidance person conducted a total of 720 interviews with students alone and a total of 175 interviews with students and parents combined. The student-parent interviews were conducted primarily during the registration period for the 1970-71 school year. In referring to the Center enrollment of 206 for the proposal year, one sees that about 85 percent of the parents were conferred with.

An orientation program was conducted by the Center for those students who are bused to Roseau for Center school classes. The orientation consisted of a tour of the various classes and a session with the guidance counselor. Since the enrollment from member schools, other than Roseau, was only 30 students during the 1970-71 school year, the number the Center attempted to reach through this orientation was relatively limited. Of the 30 possible students, 21 attended the orientation session.

In discussing this problem with the Center director and the guidance director, it was found that a major limitation is imposed on this orientation and dissemination activity by some of the member schools which allow the Center staff to confer only with those students who have indicated an interest in attending the Center. This means that there are several students in the member schools who are never given an opportunity to hear about the Center from those who can best explain its benefits to the student. It is the opinion of the evaluating team that if member schools are to utilize the Center in the most effective way so that all its graduates

can be most effectively prepared for life after graduation, all students must be given the opportunity to hear what the Center has to offer them and then to choose to enroll or not to enroll in Center courses.

I 3. Special Needs Areas

Some effort has been expended by the Center to provide for students with special needs. The Work Experience program conducted by the Roseau School is a good example of an attempt to serve the disadvantaged student. Still, this is limited to one school's student body and only a limited portion of even that school's students who fall into the "special needs" category.

The number of special needs students enrolled in the courses under the direction of the Center are as follows:

TABLE XVII

No. Students Enrolled Identified as SLD

Program	1969-70	1970-71
Carpentry		12
Occupational Foods		14
Personal Services		2
Small Engines		21
Welding		6
Work Exploration		<u>9</u>
TOTAL		64

The number of students enrolled or assisted under the Tutor-Tutee program for the 1970-71 year was 9. These nine were from Roseau. There is no record of other students from other schools being included in this program.

I 4. Preparation for Post-Center Experience

Throughout the proposal, the major theme was that the students who availed themselves of the opportunities of the Center should be prepared for life immediately after leaving the Center. Within this line of thought, the proposal emphasized that the student should be prepared to immediately assume an employment position upon graduation or he should be adequately informed of the educational opportunities available to him in the form of post-secondary vocational schools or in regular college programs. In keeping with these objectives, the evaluation team sought to determine how well the Center provided for the achievement of these goals.

a. Providing Information of the World of Work

One question directed to the Center personnel was how they utilized visitors and guest speakers to provide information about specific occupational offerings. In response, the following list was submitted, describing the kinds of occupational information given by representatives of those occupations to students at the Center. Some were represented at the annual Career Day.

TABLE XVIII

Occupations Represented
by Visiting Resource Personnel

Agriculture	Accounting
Air Force	Advertising
Air Force Academy	Auto Mechanics
Radio Announcing	Art
Army	Banking
Beauty Culture	Business Management
Engineering	Music
Forestry	Photography
Law Enforcement	Secretarial
Marines	Teaching
Marvin Millwork, MN.	Telephone Services
Ontario Paper Co.	Arctic Cat Enterprises
U. S. Navy	Simpson Sears
Nursing and Health	Farmers Coop.
Polaris Industries	Elevator
Rowell Laboratories	Land O'Lakes
Land O'Lakes Turkey Processing Plan	Creamery

This indicates that a fair attempt has been made to familiarize students with several types of occupations.

An added feature in the attempt to disseminate information about occupations is the use of the VIEW Project 3M Reader-Printer, used in the guidance office, to describe occupations available to the students. In this description is information about the competencies needed and some information concerning supply and demand for persons in the respective occupations. Figures given are based upon Minnesota Manpower figures.

Generally speaking, the evaluation team felt that the efforts to meet the proposal objective were satisfactory.

b. Providing Information About Post-Secondary Educational Opportunities

The proposal placed a great deal of emphasis upon the objective of providing Center students with information concerning post-secondary educational opportunities. In keeping with this, the Center invited representatives of the Area Vocational-Technical Schools to visit the Center and to describe their school's program to interested students. Tables XIX and XX indicate the extent to which the Center students have been given the opportunity to learn about post-secondary programs from the representatives of those programs.

TABLE XIX

Visitors from Post-Secondary Education Institutions
Speaking to Center Students (1969-1970)

Institutions	Date	Purpose of Appearance
Alexandria	9-26-69	Career Day
Brainerd	9-26-69	Career Day
Detroit Lakes	9-26-69	Career Day
Hibbing	9-26-69	Career Day
Minn. Tec. Inst., Crookston	9-26-69	Career Day
Moorhead	9-26-69	Career Day
NW Electronics Institute	9-26-69	Career Day
Thief River Falls	9-26-69	Career Day
Staples	9-26-69	Career Day
	12- -70	Two instructors spoke

TABLE XX

Visitors from Post-Secondary Education Institutions
Speaking to Center Students (1970-1971)

Institutions	Date	Purpose of Appearance
Alexandria	9-24-70	Career Day
Brainerd	9-24-70	Career Day
Moorhead	9-24-70	Career Day
Staples	9-24-70	Career Day
Thief River Falls	9-24-70	Career Day
Hibbing	9-24-70	Career Day
Detroit Lakes	9-24-70	Career Day
Staples	9- -70	Two instructors spoke to interested students
Univ. of Minn. Tech. Institute	2- -71	Admissions person spoke to students
Univ. of Minn. Tech. Institute	3- -71	Business dept. rep. spoke to students

For the school year 1969-70, Center personnel assisted 25 students in enrolling in a post-secondary area vocational-technical institute. During 1970-71, 21 students were assisted in enrolling in these schools. It must be noted that these figures represent only students from Roseau High School. It is assumed that more than the 25 students and the 21 students for the respective years attended area vocational-technical institutes but no data was available from the other member schools.

Table XXI indicates the post-secondary schools most likely to be attended by Roseau County graduates who seek further vocational training.

TABLE XXI

Post-Secondary Vocational-Technical Schools
 Attended by Roseau Center Graduates

Area School	Number Attending During		
	1969-70	1970-71	1971-72
Thief River Falls AVTI		10	6
Staples AVTI		2	3
Moorhead AVTI		3	0
Brainerd AVTI		2	0
Detroit Lakes AVTI		1	0
Alexandria AVTI		2	5
Wadena AVTI		1	0
Willmar AVTI		0	1
Northwestern Electronics Institute		2	0
Dunwoody Technical Institute		2	2
Crookston Technical Institute (U of M)		0	4

The above figures do not account for enrollment by students from Badger, Greenbush, or Warroad.

In response to the question of how the Center assists its graduates to enroll in the area vocational-technical institutes, the following list was submitted.

1. Evaluation of their aptitudes by use of the U. S. Employment Service General Aptitude Test Battery. This is administered at the Center.
2. Evaluation of their interests by use of the Minnesota Vocational Interest Survey.

3. Vocational school visitation either by field trips or individually with parents or friends.
4. School representatives coming to the Center to discuss their school's program at both the annual Career Day and individually.
5. By vocational Center teachers emphasizing the different training programs available in respective occupational areas.
6. Using a booth at the County Fair to distribute vocational information.
7. Slide and movie presentations to students.

In addition to the above list, conversation with Center personnel indicated that instructors in the various areas took upon themselves a major portion of the responsibility of advising students about specific courses in specific area vocational schools.

The evaluation team feels that the Center personnel are making positive efforts to direct their students into proper post-secondary programs.

c. Articulation of Center Program with Area Vocational-Technical Schools

Thus far, the Center has not been overly successful in achieving the goal of articulation with post-secondary schools. Center personnel have been working on this problem and have succeeded in gaining advanced standing status for some of their carpentry program graduates at the Thief River Falls Area Vocational-Technical Institute. Hopefully more success will be forthcoming in this effort for articulation. One problem encountered is that each area vocational-technical institute determines if and when advanced standing will be granted and there is no uniform policy identifiable among these schools.

I 5. Placement

An important part of any vocational program is its ability to place the students it has trained. The proposal rated this as a high priority item.

The Roseau Center has provided some placement service for its students but this too is an area that more time will be devoted to in the future.

One difficulty encountered by the evaluation team in assessing the Center's efforts in placement was the fact that placement figures for only those Center graduates who were from Roseau High School were available. Students from Warroad, Badger, or Greenbush were not included in the 27 students who were graduated in 1970 and who were placed by the Center or the 20 students who were placed in 1971.

The placement service offered by the Center school was, at the time the evaluation was conducted, an informal service provided by the director, guidance counselor, and vocational instructors. This service is provided students in regular high school vocational programs as well as those enrolled in Center courses.

I 6. Follow Up

Center activity in this area includes a detailed survey of the 1968 graduates of Roseau High School, a one year follow up of 1970 Vocational Center School graduates, and a follow up of 1971 Center graduates now being conducted.

Table XXII presents data gathered by the follow up of 1970 Center graduates while Table XXIII presents data on 1971 Center graduates who attended from Roseau High School.

TABLE XXII

Follow Up of 1970 Center Graduates

		Personal Services 09.0299	Distributive Education 04.000	Carpentry .3699	Small Engines .3100	Total
Graduates:	M	0	12	6	20	38
	F	21	7	0	0	28
<u>UNAVAILABLE FOR EMPLOYMENT</u>						
In Armed Services	M	0	1	0	2	3
	F	0	0	0	0	0
Full Time School	M	0	7	4	11	22
	F	7	4	0	0	11
Other Reasons	M	0	0	0	0	0
	F	2	0	0	0	2
<u>EMPLOYED FULL TIME</u>						
In Occupation Trained For	M	0	2	0	3	5
	F	5	2	0	0	7
In Related Occupation	M	0	0	2	3	5
	F	3	1	0	0	4
Other	M	0	1	0	1	2
	F	4	0	0	0	4
<u>UNEMPLOYED</u>						
	M	0	1	0	0	1
	F	0	0	0	0	0

TABLE XXIII

Follow Up of 1971 Center Graduates Attending from
Roseau High School*

	Personal Services	Distrib. Educ.	Small Engines	Occup. Foods	Carpentry	Welding
Graduates:	no seniors	24	24	8	7	3
Employed in Related Occupation		5	9	2	4	1
Employed in Unrelated Occupation		0	6	2	1	2
In Post-Sec. Training Rel. to Center Training		9	5	2	2	0
Attending College		6	4	2	0	0
In Armed Services		1	0	0	0	0
Housewife		2	0	0	0	0
Other		1	0	0	0	0

*The above information was not available for the other member schools.

In order to gain an overview of the Center's impact on the combined student bodies of the member schools, the information contained in Table XXIV was asked for. Only data from Roseau High School was submitted.

TABLE XXIV

Follow Up of Roseau High School Student Bodies
1968-69, 1969-70, and 1970-71

	1968-69	1969-70	1970-71
Enrollment (9-12)	465	461	455
Voc. Enrollment (9-12)	280	305	309
Total Dropouts	11	6	12
Vocational Dropouts	4	3	7
Seniors Attending College	41	40	55
Vocational Seniors Attending College	8	16	29
Seniors Attending Area Voc.-Tech. Schools	14	32	29
Voc. Seniors Attending Voc. Tech. Schools	12	22	20
Total Seniors Employed	30	31	28
Voc. Seniors Employed	18	24	25

Data in Table XXIV indicates that for the Roseau High School student body, the Center did have the desired effect of increasing enrollment in vocational education, despite the fact that total enrollment remained fairly constant. The first year did bring about a decrease in dropouts but the number was up again the next year. During the two years

the Center has been operating, there has been an increase in the number of students going to college and to post-secondary training programs.

Community Service

Much of the Center's community service activity was included in the portion of the paper which described the Center's program and operation.

Community service activity ranges from offering adult vocational courses to courses which are for personal enrichment. The courses which have been offered in this part of the Center's operation include:

Vocational Courses

Short Term: 10 Meetings, meetings 2 to 3 hours in length.

Small Business Management
Cabinet Making
Small Engines
Shorthand
Home Nursing
Welding
Electricity
Drafting
Typing

In Plant Upgrading and Retraining:

Basic Machinist
Drafting
Blueprint Reading

Apprenticeship Training: (Offers the 144 hours of related classroom work required of the apprentice)
Electricians Helper

College Level Programs: (Taught by instructors from
Bemidji State College)

Freshman English

General Biology

Accounting

These will be first offered in 1971-72 school year. They will be taught on a sequence basis and are for full college credit if the student wishes it to be.

Fun or Recreational Courses:

Interior Decorating

Scandinavian Cooking

Beginning Sewing

Marriage Enrichment

Dog Obedience

Art

Slimnastics

Men's Gym

Knitting

Public Speaking

Norwegian

Speed Reading

In addition to the above courses, the Center has had great success with its Basic Adult Education courses and work toward the High School Equivalency Certificate.

Over 250 adults took advantage of the Center's adult offerings during the proposal year. Table XXV presents data on those adults enrolled in vocational courses.

TABLE XXV

Information on Adults Attending Center Vocational Courses

	Farm management			Business-Office			Trades-Industry		
	68-69	69-70	70-71	68-69	69-70	70-71	68-69	69-70	70-71
Number enrolled	45	50	53	0	59	76	0	129	58
<u>Status when Enrolled:</u>									
Unemployed		0	0	0	3	1	0	0	2
Underemployed		0	0	0	0	0	0	0	0
Updating	45	50	53	0	59	75	0	129	56
<u>Present status:</u>									
Employed, occupation related to training	45	50	53	0	50	66	0	120	50
Employed, occupation unrelated to training	0	0	0	0	0	0	0	5	3
Unemployed	0	0	0	0	0	0	0	3	3
Unavailable for Employment	0	0	0	0	6	7	0	1	0

RESULTS AND ACCOMPLISHMENTS

In reviewing the accomplishments of the Roseau County Vocational Center, one first notes a very successful attempt to develop a public relations and dissemination program. This program operated on local, regional, and state levels and enabled many other communities and school administrators to become acquainted with the Vocational Center concept.

Program accomplishments should be viewed in the perspective of program objectives. Specific accomplishments are:

1. The Center exceeded the proposed enrollment of 150 students during the project year. A total of 206 secondary students were enrolled, up from the previous year's enrollment of 149. The 206 students enrolled accounts for 38 percent of the eleventh and twelfth grade students enrolled in public secondary schools in Roseau County.
2. During the project year, the Center offered its students six vocational courses which were not available in either of the member schools.
3. For the adults of the community, the Center offered nine short term vocational courses, sponsored three in-plant upgrading and retraining courses, and offered related instruction for persons in the Electrician's Helpers Apprenticeship program.
4. Per pupil cost of operation of the Center decreased from \$583 during the year 1969-70 to \$482 during the project year.
5. All public secondary schools in Roseau County (there are four) are participants in the Center program. It should be noted that the quality of participation varies from school to school.
6. The Center has provided a broad community service to residents of the County. In addition to vocational course offerings, the Center has sponsored a variety

of other educational opportunities for the adult community. Examples of these are a vocational, recreational, basic education, and college credit courses.

7. The Center's advisory committee does not have Manpower representatives in its membership but the Center has been very successful in gaining input from the industrial and business community through utilization of representatives from these areas on the advisory committee.
8. Thus far, the Center has not realized the goal of participating in Manpower programs or of participating in CAMPS meetings.
9. A major accomplishment is that many students in the member schools are now in class for a greater number of class hours each day. Where students had previously elected to take study hall, several are now taking a full day of classes, utilizing Center offerings as part of the class day.
10. The Center vastly improved its guidance function during the project year. This is largely due to the efforts of a full time guidance person employed by the Center in August of 1970. The Center has sponsored Career Days in addition to individual visits from representatives of both business and post-secondary institutions.

The guidance person has visited with the parents of almost all Center school students, explaining the program and the Center in general.

The Center has had a positive influence on the number of students who are attending post-secondary vocational schools and has assisted students in enrolling in these institutions.

During the project year, a program of placement and follow up was initiated. This program is progressing but still has room for improvement.

During the latter part of the project year, the Center established a Job Exploration program at Roseau for students who were potential dropouts. The major objective of the program is to lead these students to re-evaluate their concept of the school in hopes that they will continue their secondary education. This program was started too late in the year to adequately evaluate its impact upon the students it aims to serve but indications are that it is having a positive effect.

EVALUATION

The evaluation team feels that most of the objectives proposed for the Roseau Vocational Center were accomplished. This was true despite problems faced in the areas of busing, scheduling, and member school participation.

Much of the success of the Center must be attributed to the energy and enthusiasm with which the Center's administrative and guidance personnel pursue their task of promoting and increasing vocational education offerings. The evaluation team anticipates that this spirit of enthusiasm will assist the Center to overcome any problems it faces and that the Center will continue to expand its offerings to a larger number of students.

The main concern which the evaluation team has relates to the participation of member schools in the Center's program. The healthy enrollment of the Center is somewhat clouded by the fact that a disproportionate majority of the students are from Roseau High School. It would be expected that Roseau High School would contribute a large number of students and the team encourages this but it must be noted that other member schools have not approached their potential Center enrollment.

The problem of member school participation also relates to the effectiveness of the Center's guidance activity. In several instances, lack of coordination in this area led to difficulty of evaluation of the program because of lack of data from all member schools.

The objective of expanded vocational education for the students of Roseau County has been met but more remains to be accomplished. Additional course offerings will enable the Center to meet the vocational needs of even more students.

In looking at the total Center program and its accomplishments, the evaluation team detected some points which need to be strengthened but generally is of the opinion that the Center is providing the students of Roseau County the opportunity to receive quality vocational training which would not be available had the Center not been established.

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS FOR THE FUTURE

Enabling Factors:

Several factors enabled the Center to reach the level of accomplishment it has achieved to date. Some are more significant than others but they all played a role in assisting the Center to meet the needs of students in the county. Among the enabling factors are:

1. Cooperation given the Center by the Roseau Public Schools.
2. An excellent public relations program initiated by Center personnel.
3. Support by the Minnesota State Department of Education.
4. Support of the industrial and business institutions in Roseau County.
5. The funding, local, state, and federal, which enabled the Center to establish itself and its program.

Limiting Factors:

Despite the overall success of the Center, limiting factors were at work which possibly hindered the accomplishment of all desired objectives. Among the limiting factors are:

1. Failure of all member schools to adequately utilize the Center.
2. An apparent limit to expansion of Center activity within the present facilities.
3. Failure of the Center personnel to have opportunity to explain the Center's program to all students in all member schools.
4. The expense and the time involved in transporting students from member schools to the Center.
5. The problem of arranging schedules so students from member schools can attend the Center.
6. Center enrollment is not yet large enough to offer the desired wide range of courses to the County's students.
7. The financial formula which determines member school responsibility for support of the Center on the basis of member school enrollment in the Center.

Recommendations:

The evaluation team would make the following recommendations regarding the Center's operation.

1. A change in the formula for local support of the Center. The present formula determines a member school's share of the Centers cost by determining the number of students from that school enrolled in the Center. This may possibly lead to a negative view toward sending students to the Center since the greater number of students attending the Center, the greater the cost to the school. The evaluation team recommends that local district cost be determined by the percentage of the County's students, grades nine through twelve, which live in that district. The reasoning here is that the schools are more likely to utilize the Center if they have already paid a flat fee than if they have to pay for each individual student who attends the Center

2. The Center administration needs to begin thinking seriously about expansion possibilities.
3. The system of exchange of information between the Center guidance office and the guidance office of each member school needs to be effected. This will necessitate a "county" approach to guidance instead of an individual community or school approach.
4. A more efficient system of collecting and storing data, particularly placement, follow-up and adult education information.

Recommendations for Future Centers:

1. Planning should include conducting surveys, within potential participating schools, to determine the needs and choices of the students who will be served and to assure an adequate student base for operation of a Center.
2. Plan a system of record keeping so the Center will have access to participating school data but definitely have the Center maintain its own records. The Center records should be contained in the Center, not combined with those of another agency.
3. Planning should assure articulation between the Center and the area vocational-technical institute Center graduates are most likely to attend. This should, among other things, be especially true in the areas of admissions and advanced standing.
4. Administrators of the various participating schools should be thoroughly oriented as to the goal of the Center and what the Center expects from the participating schools.
5. Funding for the Center, on the local level, should be based upon student enrollment in the member schools, not strictly upon enrollment in Center courses.

6. The planning process should be given sufficient time to adequately attend to the many details necessary for successful Center operation. Establishment of a Center should not be based upon the fact that funds are available if insufficient planning time has been allowed.
7. A very strong recommendation is that all centers have personnel who have a sole responsibility of attending to the guidance function. The number of guidance personnel should be adequate to accomplish the objective stated in the proposal.
8. Follow-up of students should be a requirement of the Center. The follow-up procedure should be uniform throughout the state so that the state effort can be effectively evaluated as well as efforts of individual Centers.
9. Definite plans should be made as to how to provide for the needs of all students, K-12. The first step now should be directed at the junior high and then efforts should be directed downward to the elementary school.
10. Planning should attempt to involve all community agencies and insure their support of the Center's activity.
11. More emphasis on the adult education program needs to be made, especially record keeping which will enable one to draw conclusions as to the adult community being served and what the needs of the adults are.

PROGRAM CONTINUATION

The third major point the evaluation team was instructed to address itself to was how the Center would continue to operate once federal funds were withdrawn. The report has already indicated that the Center has been supported by federal, state, and local monies.

It is expected that state and local funds will continue to support the Center when federal funds are withdrawn. In fact, the project year was completed on September 30, 1971 and the Center is being continued for the school year 1971-72.

When Center personnel were asked to give the evaluation team some indication of the financial structure which would be used to continue Center operation, no clear answer was available. One reason for their inability to answer this question was the fact that the member school boards were to meet at a future time to determine the local support provided the Center.

Without information as to what the structure of local support for the Center will be, the evaluation team is not in a position to determine how the Center will be supported when federal funds are withdrawn.

LITERATURE CITED

1. Copa, George H., "Minnesota's South Central Vocational Center--A Case Study," Minnesota State Department of Education, St. Paul, 1970.
2. Domian, Otto E. and Olson, Manley E., "Educational 1967, A Statewide Study of Elementary, Secondary, and Area Vocational-Technical Education in Minnesota," Bureau of Field Studies and Surveys, College of Education, University of Minnesota, Minneapolis, August, 1967.
3. Kodet, Leonard B. et al, "Vocational-Technical Education 1969--A Study of the Role and Function of Secondary Vocational Education In the State of Minnesota," Program Planning and Development Section, Division of Vocational Education, Minnesota State Department of Education, St. Paul, November, 1968.
4. Laws Relating to the Minnesota Public School System, Minnesota State Department of Education, St. Paul, 1965.
5. Miles, Guy H., "Amelioration of Critical Education Needs in Minnesota Through Innovative and Exemplary Programs," North Star Research and Development Institute, Minneapolis, June, 1969.
6. "Proposal for Exemplary Program or Project in Vocational Education," Division of Vocational-Technical Education, Minnesota State Department of Education, St. Paul.
7. "Quarterly Report: Exemplary Project in Vocational Education," Division of Vocational-Technical Education, Minnesota State Department of Education, St. Paul, March, 1971.

PART II

SOUTH CENTRAL MINNESOTA VOCATIONAL CENTER

TABLE OF CONTENTS

	<u>Page</u>
Table of Contents	i
List of Tables	ii
Summary of the Report	1
Time Period Covered by the Report	1
Goals and Objectives of the Project	1
Procedures Followed	2
Results and Accomplishments	2
Evaluation	4
Conclusions and Recommendations	4
Body of the Report	6
Introduction to the Problem	6
Concept Development	7
Program Objectives	9
Center Organization	10
Implementation Procedure	10
Dissemination of Information	13
Advisory Committee	13
Center Personnel	14
Program and Operation	15
Facilities	15
Program Implementation	16
Parameters of the Report	17
Participation in Program Operation	17
Financial Arrangement	21
Coop Program Defined	28
Guidance and Follow-Up Procedures	28
Adult Programs	38
Observations and Recommendations	39
Assisting Factors	39
Yet to be Accomplished	40
Factors Preventing Objective Achievement	42
Recommendations for Future Vocational Centers	42
Literature Cited	45
Appendix A	i
Appendix B	ii

LIST OF TABLES

<u>Table</u>		<u>Page</u>
I	South Central Minnesota Vocational Center Advisory Committee 1970-71	14
II	Qualifications of Center Personnel	15
III	Distance and Travel Time	16
IV	Enrollment--Senior High Programs for 1969-70 and 1970-71 School Years	18
V	Participation of Member Schools in Center Programs	19
VI	Vocational Education Programs Offered at Member Schools During the 1968-69 School Year	20
VII	Enrollment in Vocational Education Programs by Year According to Where Offered	21
VIII a&b	Operational Costs of Vocational Center Member Schools	23&24
IX	Inputs in Terms of Total Costs	26
X	Standardized Tests Used by Member Schools	29&30
XI	Visits by Industry Personnel to Discuss Profession with Center Students	31
XII	Follow-Up Information on Secondary Center Students	33&34
XIII	Secondary Graduates Follow-Up Data for Participating Schools 1969-1971	35
XIV	Number of Special Needs Students Enrolled in Vocational Programs, Including Disadvantaged	38

Summary of the Report

This is the final report of a project to demonstrate making vocational education more accessible to persons in rural Minnesota through Cooperative Vocational Centers. The proposal was submitted to the U.S. Commissioner of Education under the provisions of Part D of the Vocational Education Amendments of 1968 by the Minnesota State Board for Vocational Education, Robert P. Van Tries, Project Director.

Funds received were in the amount of \$111,101 and were expended during the time period of October 1, 1970 to September 30, 1971. Funding was handled through the applicant organization, the Minnesota State Board for Vocational Education. This report covers the activities involved with this project during the above time period.

Goals and Objectives of the Project

The proposal title expressed the basic objective of the project to make vocational education more accessible to rural Minnesotans through secondary vocational centers. In order to achieve this objective, the proposal stipulated the following goals or objectives: 1) The Center would not eliminate previously established vocational offerings in the member schools; 2) Center operation would expand present vocational offerings by adding new courses and adding special courses that member schools could not offer by themselves; 3) An additional 150 secondary students would be served, resulting in 67.2% of the target population being served; 4) Multi-occupational cooperative education programs would be provided to make youth career-conscious; 5) Group guidance would be provided to make youth career-conscious; 6) The curriculum would consist of a sequence of skills and related courses in a cluster of occupations that would lead directly to entry-level jobs of post high school training in vocational-technical programs; 7) The curriculum would be designed to provide high quality program offerings developed for actual or anticipated opportunities for employment and suited to the needs, interests, and abilities of persons to benefit from such training; 8) Manpower representatives would serve on advisory committees and the center facilities would be used to conduct manpower sponsored programs; 9) Center personnel would participate in the development of Regional Cooperative Area Manpower

Planning System (CAMPS) Plan; and 10) Vocational Center staff members would work with faculty members of participating schools to improve understanding among educators.

Procedures Followed

In order to accomplish these objectives, exemplary programs were established at Blue Earth and Roseau, Minnesota. The organizational chart in Appendix A shows the administrative relationships in the local project locations. The reason for placing the demonstration in two locations was to demonstrate the concept in locations that would be more accessible to other schools in the state. Replication in two locations was designed to increase the efficiency and effectiveness of the demonstration in the state.

Program activities in all areas were modified from basic vocational courses in terms of length of time of class sessions, curriculum content, and instructional methods. Of the total federal funds expended, \$63,177 went to Blue Earth with \$47,924 of the Part D funds going to Roseau. To supplement the federal funds, \$150,939 of state and local monies were spent in the two locations--\$94,168 at Blue Earth and \$56,771 at Roseau, a total expenditure of \$262,040.

Results and Accomplishments

Results and accomplishments of the Center will be reviewed in light of the objectives previously set forth. The Center has not eliminated any vocational courses that were being offered in member schools before the inception of the Center. Courses in auto services, health occupations, electronics, model office business education, and carpentry were not available to secondary students through their home high school, but were available through the Center in 1970-71. Also, junior high school programs in electronics and small engines were initiated by the Center and were in operation during the project year.

Enrollment in eight short-term adult courses totaled 126 during the project year, with another 40 families enrolled in the adult farm management program. These adult course offerings paralleled the secondary program topics; they, likewise, were not available previous to Center operation.

The goal of 150 additional secondary students was

exceeded--163 eleventh and twelfth graders participated in Center programs during the 1970-71 school year. Enrollment for the 1971-72 school year stood at 215 secondary students in six programs--agribusiness/mechanics was added. As of September 30, 1971, all but one school within reasonable driving distance of the Center was participating in Center programs. Participation by each of the member schools was most encouraging as five of the six outlying schools had a Center enrollment percentage higher than their base population percentage. Three schools had increased Center enrollments in 1970-71 as compared to 1969-70, two schools had basically constant enrollment for the two years, while two schools had a lower enrollment in 1970-71 than they did in 1969-70.

Greater numbers of students enrolled in area vocational-technical schools following the inception of the Center. Almost three times as many 1971 high school graduates went on to receive training at an AVTS as did 1969 high school graduates from the same schools. Forty-three students from the Center were assisted in enrolling in area schools, with several attaining advanced standing at their chosen post-secondary school. Of the 68 Center graduates pursuing further education, 51 went into a program related to their Center sponsored course. In 1969-70, 39 of 41 Center graduates going on for further training went into a related program.

Job placement figures for the two years of Center operations are very similar. Of the 29 graduates for 1971 that became employed following program completion, 20 were employed in occupations related to their Center program. In 1970, 21 of 28 graduates reported similar status. Job placement was assisted by Center instructors.

Of the total secondary enrollment of 163 during 1970-71, 76 students were classified as "special needs" students. During 1969-70, 63 of 143 secondary students were similarly classified, an indication that students with special needs are being served by Center programs.

Advisory committees have served and continue to serve an important role in the Center's operation. Advisory committees were established not only for the overall planning, but also for each of the individual programs offered by the Center. Instructors are responsible for organizing individual program committees.

Discussion among educators was achieved through open houses at the Center, special meetings for Center and member school instructors, and discussion among the superintendents and other administrative personnel of participating schools.

Evaluation

The accomplishments of the Center during its short life span are impressive. These results were accomplished despite problems of busing, scheduling, and the difficulty of fostering cooperation among several administrative bodies.

The cooperation among the member schools is commendable. Many scheduling problems have had to be solved in order to meet student needs. Agreement on an equitable financing plan has assisted in the planning and stability of the Center.

Enthusiasm among Center personnel as well as that of students, parents, and community members has greatly assisted the implementation of Center plans. Community support has been strong, and acceptance well won. An effective public relations program has accomplished the dual task of explaining and soliciting support. With continued hard work, enthusiasm and member school participation, the Center would appear to be assured of quality vocational education programs.

Conclusions and Recommendations

The South Central Vocational Center has come a long way; it has some areas yet to develop. It would appear most appropriate that efforts be made in both directions from the secondary level of education downward into junior high and elementary programs, and upward into adult programs. With additional effort in these areas, the Center will be serving more people and affording the articulation so needed in vocational education.

Articulation between high school vocational education programs and post-secondary programs needs discussion and action. Students should not be faced with the possibility of having to repeat a good secondary training program just because the post-secondary school has not made provision for advanced standing for highly qualified individuals.

The guidance department needs to be staffed by a full-time person at Blue Earth so that many of the necessary

educational functions can be coordinated. This includes follow-up of enrollees and assistance in attaining advanced standing at post-secondary schools, as well as establishing a general record-keeping and evaluation system.

More courses should be offered so that at least one program in each vocational-technical field is represented at the Center.

Recommendations for this and future centers include:

- 1) Allow adequate lead time before establishing a Center to plan course offerings based on manpower needs and student needs;
- 2) Make sure that the geographic area is large enough to assure an adequate student base for at least seven vocational courses offerings at the secondary level;
- 3) Involve the community, local business, and industry as well as other governmental units;
- 4) Communicate with fellow school administrators and establish a sound public relations program;
- 5) Finance the operation on the basis of member school enrollments, not on the basis of participation in Center sponsored courses;
- 6) Establish a system of articulation for students to assure their optimal movement K-14;
- 7) Hire a full-time guidance person to coordinate the guidance function;
- 8) Establish a complete record keeping system for all Center participants;
- 9) Incorporate a definite, coordinated adult education segment into the program.

Body of the Report

Vocational education today faces one of its greatest challenges. According to the Vocational and Technical Education Annual Report for fiscal year 1968, only five percent of the nation's schools and working age population was being served. Although numerous strides have been made in vocational-technical education, major accomplishments during recent years have consisted of expanded enrollments and expenditures in successful, established programs.

Four million students in grades 9-12 were enrolled in vocational education courses in 1968; approximately 27% of the total secondary enrollment in that age category. Some states showed a marked improvement over this average figure. Florida, for example, reported that 37% of all high school students took vocational education courses, while in North Carolina, 52% of all secondary youth took vocational education courses. Yet, vocational educators are constantly aware that fully 80% of those enrolled in our nation's high schools need or could profit from some phase of vocational education. Minnesota's Long Range Plan indicates that 14.5% of their secondary school students are enrolled in reimbursed programs of vocational education.

Why don't students enroll? There are numerous reasons, but all too often the reason is lack of availability. Very often course are not available to students because of insufficient enrollees to warrant offering the program. This is especially true in rural areas with small student populations in each high school.

A study by Domian and Olson (1967) indicated that over two thirds of districts in Minnesota enroll fewer than 500 students in grades 7-12, and account for less than one-fourth of the total state enrollment. They found a "clear (positive) association between size of a district's secondary enrollment and the number of courses offered in its secondary grades." (p.75) They found that nearly 25% of schools enrolling less than 150 secondary students had no approved vocational departments.

A 1968 study by Kodet, et al, on the role and function of secondary vocational education in Minnesota found that 296 district superintendents stated their district was not

adequately providing effective vocational education for their students, while 288 districts indicated they lacked an active job placement service for graduates. Administrators identified four major factors as limiting effective vocational education: 1) Lack of finance, 2) Insufficient school size and lack of space, 3) Low enrollment and pupil interest, 4) Inadequate staff (p.40). Kodet recommended that secondary vocational centers be established to provide needed vocational education. Basically, a vocational center was defined as a group of schools cooperating in planning and providing vocational education for all students of all member schools.

A study by Miles, et al (1969) identified two major educational needs concerning vocational-technical education at the secondary level: 1) To make vocational education more relevant to the world of work, and 2) To increase the opportunity for student participation in vocational programs.

In January 1969, the Minnesota State Board of Education sponsored the recommendations of Kodet, et al, concerning secondary vocational centers, thus officially originating this concept as a part of Minnesota's vocational education program. The State Board's acceptance of the secondary vocational center concept, coupled with the outspoken needs of students and parents in the Blue Earth, Minnesota area, lead to the establishment of the South Central Vocational Center.

Concept Development

Even before the secondary vocational concept was accepted on a state level, the framework for the South Central Vocational Center was emerging. The first explicit statement of need for the Center came in 1967 when students of the diversified education programs at Blue Earth voiced an interest in an auto mechanics class. The diversified education instructor at Blue Earth informed his superintendent of this interest.

Since Blue Earth did not have enough students interested in an auto mechanics program to justify its large expense, the Blue Earth superintendent invited superintendents of the schools in the surrounding area to engage in a program cooperatively. When the superintendents at Elmore and Frost responded affirmatively, the vocational director at Blue Earth met with the Elmore and Frost School Boards to discuss the possibilities of a cooperative arrangement. The

Board of Education at each of these two school boards voted to participate in the auto mechanics program.

The auto mechanics program began in September of 1968 with students from Blue Earth and Elmore participating. Frost students were unable to come as a result of a scheduling difficulty.

At the end of the school year, students, parents, and school personnel expressed pleasure with the results of the program. Staff of the Minnesota State Department of Education who had observed the program's operation urged its expansion.

Thus, four factors provided impetus for developing the South Central Vocational Center: 1) Success of an inter-district auto mechanics program; 2) Acceptance of the concept of secondary vocational education centers; 3) Availability of state and local funds; and 4) The permissive provisions of Minnesota Statute 471.59 (Joint Powers Act) which allows school districts to do jointly what they may do separately, thus legally permitting the establishment of secondary vocational centers.

The Division of Vocational-Technical Education of the Minnesota State Department of Education took action to develop the concept of vocational centers. Among other things, they submitted a proposal to the U.S. Commissioner of Education under the provisions of Part D of the Vocational Education Amendments of 1968 to obtain funds for an exemplary project. This money was requested for the purpose of demonstrating a means of expanding vocational education by establishing vocational education centers in two widely separated rural locations in the state.

The local education agencies selected to participate in the project were chosen on the basis of their:

1. Demonstrated interest in the vocational center concept.
2. Location in different areas of the state.
3. Willingness to share results with other interested local educational agencies and groups.
4. Availability of facilities for program operation.

The proposal submitted to the United States Office of Education contained the objectives of the project. The basic objective of the South Central Vocational Center, as stated in the proposal was "To make vocational education readily available to secondary students and adults in the state of Minnesota." The State Plan for Vocational-Technical Education defines three major areas of concern for secondary education: 1) Orientation to the world of work, 2) Pre-vocational-technical education, and 3) Vocational-technical education.

Program Objectives

In order to achieve these objectives, the proposal stipulated the following: 1) The Center would not eliminate previously established vocational courses in member schools; 2) Center operation would expand present vocational offerings by adding new courses and adding special courses that member schools could not offer by themselves; 3) An additional 150 secondary students would be served, resulting in 67.2% of the target population being served by member school and Center programs; 4) A multi-occupational cooperative education program would be established; 5) Group guidance would be provided to make youth career conscious; 6) The curriculum would consist of a sequence of skills and related courses in a cluster of occupations that would lead directly to entry-level jobs or post-high school training in vocational-technical programs; 7) The curriculum would be designed to provide high quality program offerings developed for actual or anticipated opportunities for employment and suited to the needs, interests, and abilities of persons to benefit from such training; 8) Manpower representatives would serve on advisory committees and the Center facilities would be used to conduct manpower sponsored programs; 9) Center personnel would participate in the development of the Regional Cooperative Area Manpower Planning System (CAMPS) plan; and 10) Vocational Center staff members would work with the faculties of the member schools to improve the understanding among educators.

It is on the basis of these objectives that the South Central Vocational Center was evaluated, and this report written. This report will examine these objectives in relation to the Center's operation.

In order to evaluate the South Central Minnesota Vocational Center's operation during the period of federal

funding, a two man team conducted an examination which involved: 1) A questionnaire developed by the evaluation team and submitted to the Director of the South Central Vocational Center (see Appendix B), and 2) An on-site visit by the team to view the facilities and operation of the program.

This report covers the period of October 1, 1970 to September 30, 1971, and attempts to: 1) Determine the extent to which the objectives of the project were accomplished, 2) Determine what factors either enabled or precluded the accomplishment of the objectives, and 3) Described the steps by which the South Central Vocational Center will promote the inclusion of the successful aspects of their program into vocational education programs supported with funds other than those provided under the federal grant.

Center Organization

Implementation Procedure

The chronology of major events provides a general flowchart of the procedures used in implementing the South Central Vocational Center. The first major step occurred when the superintendent of the Blue Earth school district issued an invitation to surrounding school districts concerning participation in a cooperatively sponsored vocational center.

The affirmatively responding superintendents met to discuss the possibilities and problems of a jointly supported vocational center. Staff members of the Program Planning and Development Section, Division of Vocational-Technical Education, Minnesota State Department of Education were on hand at this meeting to answer questions concerning legality, organization, state and federal support, budgeting and programming. At this meeting, an administrative committee was formed which consisted of the superintendents at Blue Earth, Brice lyn, Huntley, and Elmore plus the Blue Earth Vocational Director. The vocational director at Blue Earth was appointed director for the pending vocational center.

Before local school boards in the cooperating school districts were contacted concerning the proposed center, two surveys were conducted. First, a subjective survey of industry needs in the school districts and surrounding communities was made. This survey generated a potential list

of programs that might justifiably be offered. Using this list, the tenth and eleventh graders of the schools were surveyed to determine which of the potential programs were of most interest. As a means of assuring the validity of this survey, the parents of these students were asked to sign a statement reflecting their belief that such a choice was realistic. Using this information for support, the superintendents of cooperating school districts met with their local school board members concerning the Center. All boards passed a resolution supporting the establishment of a vocational center. At this point, the Center's administrative committee, with state department consultation, set up a budget and began enrolling students, hiring teachers, developing programs, and acquiring equipment and facilities.

The major events that occurred during the development of the Center are chronologically summarized as follows:

1968	
November	Superintendent and vocational director at Blue Earth issued invitations to other schools in the area for a meeting to discuss possibility of a secondary vocational center.
1969	
January	Students of cooperating schools surveyed to determine interest; parents of students surveyed to determine if interests were valid; local industries surveyed to determine their needs.
February	School Boards of cooperating schools were invited to a meeting to discuss the possibilities and problems of a secondary vocational center.
March	Students enrolled in four programs: automobile mechanics, health occupations, business, and electronics.
April	Started organizing for instruction: rent facilities, buy equipment, hire teachers.
September	Started operation of vocational center with four secondary programs.

October	Held open house for staffs of member schools.
November	Held meeting of vocational teachers from all member schools for purpose of communication and coordination of Vocational Center's activities. Vocational Center opened for tours by public. Held open house for residents of member school districts.
December	Center added adult farm management program.
1970 January	Center conducted adult evening instruction for residents of member school districts. Areas of instruction were the same as for secondary students.
March	Made decision to add another regular school year program in building trades. Visit by state department to develop planning and evaluation criteria for secondary centers.
April	Visit by State Board of Education to communicate the results and implications of Vocational Center's activities.
1971 January February	Met with PTA groups to show slides and update people on the operation of the Center. Had 10th and 11th grade students from participating schools in to observe the classes in operation. Open house and annual meeting for all school board members.
March April	Visited all schools and conducted pre-registration for 71-72 school year. Met with group of principals to set schedule for 71-72.
May June	Completed all placement procedures for class members who were graduating. Completed all necessary forms for State Department of Education.

July	Visited all schools to finalize registra-
September	tion, meet with all administrators, espe-
	cially five new administrators. Agri-
	Mechanics instructor started preparation
	for Agri-Mechanics and Agri-Business
	conference attended by all staff members.
	Teacher workshop conducted August 23-27.
	School started August 31.

Dissemination of Information

Various methods have been used to disseminate information concerning the Center's operation. From its inception, communications have been designed to keep the public and students informed. Communication within the member school districts has involved administrators, school boards, teachers, and district residents. Administrator communication was handled through the Administrative Advisory Committee and through memorandums from the Center's director. The administrators, in turn, communicated with their school boards, teachers, and district residents.

Provisions made to enhance within-member school district communication included: 1) An "open house" for all teachers, administrators, and residents (more than 600 people had toured the facilities by July 1, 1970), and 2) Special sessions sponsored by Center instructors which member-school teachers could attend.

Media used in disseminating information included radio, newspaper, magazine, television, and word of mouth. Extensive coverage of Center programs and activities was provided in each of the member school communities as well as outside the immediate area. Communication on a state-wide basis involved an open house for legislators and state department personnel. The State Board of Education made an on-site visit, and articles have appeared in numerous magazines.

Advisory Committee

Advisory committees operate at three levels for the Center: 1) The Administrative Advisory Committee consists of the superintendents from the participating schools. This group serves in a total program advisory capacity and is called together when major issues concerning the Center are decided; 2) Twelve members of the Center Advisory Committee

(individuals from business, industry, professions, and farming) meets once each year as a general committee to discuss program offerings and Center operation. Members of this committee are listed in Table I; 3) A Program Advisory Committee operates for each of the Center's instructional programs. The teacher for a given program is responsible for the formation and operation of that program's committee. These committees, used in developing program curriculum and maintaining contact with local industries, meet several times each year as is needed. Members of these committees represent the respective industry or business that each program trains for.

Table I
South Central Minnesota Vocational Center
Advisory Committee 1970-71

<u>Name</u>	<u>Address</u>	<u>Position</u>	<u>Duration of Membership</u>
Robert Dusek	Blue Earth	Garage Manager	3 years
Elmer Tysver	Bricelyn	Carpenter	3 years
Arnold Mensing	Elmore	Farmer	2 years
Dr. Nelson	Bricelyn	Veterinarian	1 year
Ron Hanson	Blue Earth	Banker	1 year
Ruth Krusemark	Blue Earth	Office Manager	3 years
Neil Royer	Winnebago	Plumber	1 year
Milo Miller	Blue Earth	Electrician	1 year
Mrs. Don Chilson	Blue Earth	Nurse	1 year
Dale Junkimeir	Elmore	Mechanic	2 years
Gerald Thedens	East Chain	Farmer	2 years
Clair Speed	Granada	Mechanic	2 years

Center Personnel

Instructors form the base for any educational venture. Center personnel were hired on the basis of vocational experience, teaching experience, formal education, and personal characteristics such as enthusiasm and imagination. Vocational and teaching experience and formal education for the Center personnel are reported in Table II.

Table II
Qualifications of Center Personnel

<u>Position</u>	<u>Years of Experience</u>		<u>Highest Education Level</u>
	<u>Vocational--</u>	<u>Teaching</u>	
Director	5* 20**	12	MS (Industrial Ed. and Administration)
Instructors			
Auto-mechanics			
Instructor A	14	-	Voc. Certificate
Instructor B	17	2	Voc. Certificate
Business Education	7	3	BS (Bus. Education)
Electronics	2	2	BS (Industrial Arts)
Health Occupations	4	1.5	BS (Nursing)
Adult Farm Mgmt.	12	7	BS (Agriculture Ed.)
Agri-mechanics/Bus.	3.5	1	BS (Agriculture Ed.)

*Full-time
**Part-time

Program and Operation

Facilities

The South Central Vocational Center is located at Blue Earth, Minnesota. The automotives program is housed in a rented building on the fairgrounds. All other programs, and the administrative office, are housed in the former Blue Earth Cooperative Creamery. This building has been remodeled to provide classroom and office space as program expansion demands. Classrooms for the agri-business/mechanics, adult farm management, carpentry, electronics, health occupations and business education programs are housed here. Additional space is available for one more classroom.

The member school districts of the South Central Vocational Center are (as of September 30, 1971): Blue Earth, Bricelyn, Delavan, East Chain, Elmore, Frost, Granada-Huntley, and Winnebago. The area covered by the Center encompasses approximately a fifteen mile radius around Blue Earth. Table III shows the approximate travel time (bus) from each of the member schools. One way travel time

varies from thirty minutes for students at Bricelyn to ten minutes for Elmore students.

Table III
Distance and Travel Time

	One Way	
	Miles	Time(min.)
Blue Earth	-	5
Bricelyn	17	30
Delavan	15	20
East Chain	20	25
Elmore	10	10
Frost	12	20
Granada	15	20
Huntley	13	15
Winnebago	9	15

Program Implementation

During January of 1969 local industries were surveyed to determine manpower needs of the area. A survey of the students in the area schools was likewise conducted for the purpose of determining which program offerings would serve the needs of the students.

On the basis of these subjective surveys, eight programs-agri-business, commercial foods, sales and marketing, building trades, automotive mechanics, business office education, electronics, and health occupations-were offered to students for their consideration. The four programs with highest student interest were auto mechanics, business, electronics, and health; these programs were offered starting fall, 1969, with a total enrollment of 143 secondary students.

During the 1969-70 school year, a nine week introductory course in electronics was given to junior high students at seven of the eight participating schools. One hour of instruction each day for nine weeks was provided by the electronics instructor hired by the Center.

Adult evening classes were offered at the Center in the same programs as those available to high school students. Two sections of auto mechanics, and one each of health occupations, business education, and electronics were conducted with a total enrollment of 66. Classes met for ten

three hour sessions. An adult farm management program was started in December of 1969, and enrolled 26 farm families. This program emphasized individual instruction and year-around enrollment.

The total cost of operating the secondary programs at the Center for 1969-70 school year was \$64,725. Program costs by program ranged from \$9,465 for electronics to \$25,450 for automotives.

Parameters of the Report

Part D monies were used for the operation of the Center for the time period October 1, 1970 to September 30, 1971. The major emphasis of this evaluation report will, therefore, involve Center operation during the 1970-71 school year. Comparative data from the first year of operation--1969-70 and the 1971-72 school year will be included wherever it is related to and further illustrates the program operation during 1970-71.

Major educational emphasis of the Center was given to secondary programs. The junior high electronics program initiated by the Center was assumed by the member schools after the 1969-70 school year; therefore federal funds were not involved with its continued operation.

Participation in Program Operation

The four programs offered to secondary students during the 1969-70 school year formed the core of Center offerings. A building trades program was added for the 1970-71 school year. All programs were offered to eleventh and twelfth grade high school students. Table IV describes the enrollment for the programs offered each of the first two years, and shows that total enrollment increased by 20 students. Twenty-seven students enrolled in the building trades program which was not available in 1969-70. Blue Earth and Elmore had the greatest student participation in 1969-70 with 45 and 32, respectively. In 1970-71, Granada-Huntley, Blue Earth, and Winnebago had at least 30 students enrolled.

Table IV
Enrollment--Senior High Center Programs for 1969-70 and 1970-71
School Years

Member School	Program and Year											
	Automotive Services		Business		Electronics		Health Occupations		Building Trades		Center School Total	
	1969-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71
Blue Earth	18	11	18	14	4	4	5	4	--	2	45	35
Bricelyn	6	6	2	1	2	3	2	0	--	1	12	11
East Chain	10	4	1	1	3	3	0	1	--	4	14	13
Elmore	13	6	12	5	2	3	5	2	--	6	32	22
Frost	3	6	1	3	0	0	4	2	--	0	8	11
Granada-Huntley	8	16	5	7	1	3	0	6	--	9	14	41
Winnebago	14	16	3	3	0	5	1	1	--	5	18	30
Total By Program	72	65	42	34	12	21	17	16	--	27	143	163
Program % of Total	50.3	39.9	29.4	20.9	8.4	12.9	11.9	9.8	--	16.6		

Table V compares the percentage of total base population (students in grades 7-12) of each of the participating schools and the percentages of total enrollment in Center programs for the 1969-70 and 1970-71 school years. This shows, for example, that in 1970-71, Blue Earth had 35% of what might be considered the total student base (enrollment in grades 7-12), and 21.4% of the total number of students enrolled in Center programs.

Table V
Participation of Member Schools in Center Programs

School	Enrollment Grades 7-12		Percent of Total Enrollment		Enrollment in Center Programs		Percent of Total Center Enrollment	
	1969- 1970	1970- 1971	1969- 1970	1970- 1971	1969- 1970	1970- 1971	1969- 1970	1970- 1971
Blue Earth	677	675	34	35	45	35	31.4	21.4
Bricelyn	166	165	9	9	12	11	8.4	6.8
East Chain	137	136	7	7	14	13	9.8	8.1
Elmore	203	201	11	10	32	22	22.4	13.5
Frost	120	114	6	6	8	11	5.6	6.8
Granada- Huntley	293	305	16	15	14	41	9.2	25.0
Winnebago	343	327	17	18	18	30	12.6	18.4
Total	1939	1923	100	100	143	163	100.	100.

An explicit objective of the proposal was to make vocational education more accessible to rural Minnesotans. It was stated in Section 5, Procedures--General Design, "The objective of the Center is to create opportunities for vocational education for youth regardless of the size of the school they attend or its location." Table VI illustrates the vocational offerings available at each of the member schools during the 1968-69 school year. All seven schools offered home economics, business and office, and industrial arts education programs. Health occupations and occupational home economics were not available at any school, while the opportunity to take agriculture, distributive, or trade and industrial education courses was very limited.

Table VI
Vocational Education Programs Offered At Member
Schools During the 1968-69 School Year

School	Agriculture	Distributive	Health Occupations	Home Economics**	Occupational Home Economics	Business & Office **	Industrial Arts **	Trade & Industrial
Blue Earth	X	X		X		X	X	X
Bricelyn				X		X	X	
East Chain				X		X	X	
Elmore				X		X	X	X*
Frost				X		X	X	
Granada-Huntley				X		X	X	
Winnebago	X			X		X	X	

*Ten students transported to Blue Earth T & I Program

**Approved Special Department for Foundation Aid Calculations

Another stated objective was: "The vocational center does not eliminate previously established vocational courses at member schools." The programs described in Table VI continued to operate as they did before the establishment of the Center. Since the Center was established to expand vocational offerings by either adding new or special courses, it is important to consider the overall enrollment in vocational education programs, whether offered by the Center or by member schools.

Table VII shows that 529 eleventh and twelfth graders were enrolled in vocational education courses offered at the home high school during the 1968-69 school year. This constituted 84.5% of the 627 students enrolled in those two grades.

In 1969-70, 143 students enrolled in Center programs,

while 590 students were enrolled in vocational programs at member schools. In 1970-71, 163 students were enrolled in vocational courses offered through the Center with another 497 enrolled at "home." When the change in member school vocational course enrollment between 1968-69 is considered, a net increase in vocational education enrollment of 194 students results. The percentage of 11th and 12th graders enrolled in vocational education courses was 86% in 1968-69, 115% in 1969-70 and 113% in 1970-71. These figures suggest that a high percentage of students take vocational education courses, and some enroll in more than one.

Table VII
Enrollment in Vocational Education Programs by
Year According to Where Offered

	1968-69	1969-70	1970-71
Student Enrollment Member Schools Grades 11-12	627	636	586
Student Enrollment Grades 11-12 in Vocational Programs			
Home School	529	590	497
Vocational Center	10	143	163
Total Vocational Education Enrollment	529	733	660

Financial Arrangement

Operation of the Center has been financed by use of regular vocational educational reimbursement funds, exemplary funds under Part D of the Vocational Act of 1968, and local funds. The objective of the financial plan was to maintain a zero balance between anticipated expenses and receipts. The local portion of expenses was determined by subtracting anticipated state and federal receipts from anticipated expenses for a given year; this deficit was the member school district's contribution to Center support.

The local share of support for individual school districts was assessed in two ways. First, each school had to contribute a portion of its regular state foundation aid on the basis of amount of time and number of students at the Center. For the senior high programs conducted at the Center, this amounted to 2/7 of their per pupil foundation aid (times) the number of pupils enrolled at the Center. The figure

2/7 is based on a seven hour school day of which the students spend two hours at the Center.

Second, assessment from state foundation aid was subtracted from the existing deficit between anticipated expenses and receipts; member schools were assessed the remaining deficit on a pro-rata basis involving total member school district enrollment grades 7-12. The Center's administrative personnel indicated that these two methods of determining member school district expenses have the advantage of assessment by student involvement and school enrollment.

Table VIII-a
Operational Costs of Vocational Center
for Member Schools

School	Contribution to Center Operation 1969-70	1970-71	Percent of Total Costs 1969-70	1970-71	Total Current Operating Expenses 1969-70	1970-71
Blue Earth	\$17,580	\$17,325	34.5%	33.2%	\$1,248	\$1,303
Bricelyn	4,430	4,376	8.7	8.4	230	326
Elmore	6,356	5,339	12.5	10.2	381	416
Frost	2,953	3,116	5.8	6.0	259	298
East Chain	3,698	3,536	7.2	6.8	285	340
Granada- Huntley	7,606	8,638	14.9	16.6	530	550
Winnebago	8,391	9,768	16.4	18.8	549	574
Total Cost	\$51,014	\$52,098			\$3,481	\$3,808
Average %						

Table VIII-b
Operational Costs of Vocational Center
for Member Schools

School	% Current Operating Expenses Earmarked for Center		Local Expenditures for Center (Excluding State, Fed. \$)		% Total Expended from Local Revenue	
	1969-70	1970-71	1969-70	1970-71	1969-70	1970-71
Blue Earth	1.41%	1.33%	\$14,280	\$14,700	81.2%	84.8%
Bricelyn	1.93	1.34	3,780	3,780	85.3	86.4
Elmore	1.67	1.28	4,620	4,200	72.7	78.7
Frost	1.14	1.05	2,520	2,520	85.3	80.9
East Chain	1.30	1.04	2,940	2,940	79.5	83.1
Granada- Huntley	1.44	1.57	6,720	6,300	89.3	72.9
Winnebago	1.53	1.70	7,140	7,560	85.1	77.4
Total Cost			\$42,000	\$42,000		
Average %	1.47%	1.37%	82.3%	80.6%		

Financial transactions for the Center were handled by the Blue Earth school district. The Blue Earth Superintendent hired teachers with the consent of the Center's Administrative Committee. Salary and other employment provisions were as found in the Blue Earth System.

A breakdown of operational costs of the Center for 1969-70 and 1970-71 is shown in Table VIII. In 1969-70 the member schools contributed \$51,014 to the Center operation. Of this total amount, Blue Earth contributed \$17,580 which was 34.5% of the total amount collected from the member schools. This percentage is very close to the 34% of the student base Blue Earth school had during that school year. Another example shows that Winnebago had 18% of the student base in 1970-71 and contributed 18.8% of the total funds.

Table VIII also shows that amount and percentage of each school's total current operating expense (COE) budgeted for Center financial support. On the average, 1.47% of the member school's total current operating expense was earmarked for Center operation in 1969-70, while 1.37% received similar "earmarking" in 1970-71.

Member districts relied mainly on local sources of funds to finance the Center, averaging over 80% for each of the two years.

In terms of inputs during 1970-71, the total cost per student enrolled in individual programs ranged from \$430.65 for the automotives program to \$899.50 for the health occupations program. The average cost over all secondary programs per student, as shown in Table IX, amounted to \$587.21 in 1970-71 as compared to \$446.38 for 1969-70. Results are shown on Table IX by instructional programs in terms of total costs per student, total costs per instructional hour, and total costs per student instructional hour. These costs do not include student transportation costs to and from the Center. Also, the special notes referring to Table IX should be considered before generalizing about the table's contents.

Table IX

Inputs in Terms of Total Costs of Center Operation

	(1) No. of Sections	(2) No. of Hours/ Session	(3) No. of Sessions	(4) No. of Students	(5) No. of Instruct. Hrs. (1x2x3)	(6) No. of Student Instruct. hrs./ (2x3)	(7) No. of Stu- dent Instruct. Hours. (4x6)	(8) Total Cost	(9) Total Cost Per Student (8/4)	(10) Total Cost Per Instructional Hour. (8/5)	(11) Total Cost Per Student Instruct. Hour. (8/7)
Senior High Program July 1, 1969- June 30, 1970											
Automotive Services	4	2	175	72	1400	350	25,200	\$25,450	\$353.47	\$18.18	\$1.01
Business Education	2	2	175	42	700	350	14,700	18,935	450.83	27.05	1.29
Electronics	1	2	175	12	350	350	4,200	9,465	788.75	27.04	2.25
Health Occupations	1	2	175	19	350	350	6,650	10,875	572.37	31.07	1.63
Senior High Program July 1, 1970- June 30, 1971											
Automotive Services	4	2	175	65	1400	350	22,750	27,992	430.65	19.99	1.23
Business Education	2	2	175	34	700	350	14,900	20,025	588.97	28.61	1.34
Electronics	2	2	175	21	700	350	7,350	16,231	772.90	23.19	2.21
Health Occupations	2	2	175	16	700	350	5,600	14,392	899.50	20.56	2.57
Building Trades	2	2	175	27	700	350	8,760	17,076	632.44	24.39	1.95

Note on Table IX

1. Total costs are based on the sum of operating expenses (supplies, salary, utilities, rent, and ancillary) and equipment costs (depreciated equally over 10 years).
2. Supply costs for the first year are higher than normally expected because some of the supplies such as books will last more than one year.
3. Salary of the electronics instructor is charged one-half to senior high, one-half to junior high.
4. Ten percent of rent and utilities for the Center building are charged to the farm management program--the balance is charged equally to business education, electronics, and health occupations.
5. No rent, utilities, travel, or supplies are charged to the adult evening classes.
6. Twenty percent of total ancillary expenses were charged to the adult evening classes and the adult farm management program (10% each)--the balance is divided into equal parts and charged to automobile services, business education, health occupations, and electronics. The electronics share is divided with one-half charged to the senior high program and one-half to the junior high program.
7. Adult farm management program was started in December, 1969. Its supply, travel, salary, and equipment costs are accounted for seven months, while utilities, rent, and ancillary expenses are accounted for 12 months since these expenses were incurred even though the program was not operating.

Coop Program Defined

Part-time cooperative occupational training is approved by Minnesota's State Plan for use in approved high schools. Generally, under such a program, persons enrolled receive part-time vocational instruction in the school that is related to on-the-job training instruction provided through part-time employment by the employer. Students enrolled in these programs are designated as student-learners.

The State Plan requires that part-time cooperative programs provide for the employment of student-learners " . . . in conformity with federal and state employment laws and regulations . . . ". Using this definition, there is no cooperative training at the South Central Vocational Center. Students enrolled in the health occupations program approach the qualifications for this program, but no wages are involved.

In order to provide on-the-job training for each student in the program, it was necessary that arrangements be made with local training stations. Because the number of such stations available for use by the Center is very limited, arrangements call for on-the-job training experience without remuneration. In this way, the students are able to receive actual job experience, something that would not be possible if the training station was required to pay each student-learner.

The arrangements made by Center personnel and the cooperating agency appear to be working smoothly and accomplishing the objective of the Center.

Guidance and Follow-Up Procedures

Adequate guidance is essential if each student is to have the opportunity to develop fully his interests and abilities. The proposal noted the importance attached to vocational guidance as an integral part of Center operation, and that guidance was an appropriate function for the Center to perform.

Tests designed to "discover" both the abilities and preferences concerning vocational choice are important in an adequate guidance program. Table X lists the standardized tests given at each of the member schools and at what age (grade) each is administered.

Table X
Standardized Tests Used by Member Schools

<u>High School</u>	<u>Test</u>	<u>Grade</u>
Blue Earth	Differential Aptitude Test	9
Blue Earth	Iowa Test of Educational Development	10
Blue Earth	Minnesota English Test	11
Blue Earth	Minnesota Scholastic Aptitude Test	11
Blue Earth	Otis Test	11
Delavan	Lorge-Thorndike Intelligence	9
Delavan	Iowa Test of Educational Development	10
Delavan	Minnesota Scholastic Aptitude Test	11
Delavan	Strong Vocational Interest Inventory	12
East Chain	Iowa Tests of Educational Development	
East Chain	Differential Aptitude Tests	
East Chain	Lorge-Thorndike Intelligence Test	
Granada-Huntley	Differential Aptitude Test	9
Granada-Huntley	Minnesota Counseling Inventory	10
Granada-Huntley	Iowa Tests of Educational Development	11
Granada-Huntley	Minnesota Scholastic Aptitude	11
Granada-Huntley	Preliminary Scholastic Aptitude	11
Granada-Huntley	National Merit Scholarship Qualifying Test (Voluntary)	11
Granada-Huntley	Armed Forces Vocational Aptitude Test (Voluntary)	11 & 12
Granada-Huntley	General Aptitude Test Battery (Voluntary)	12
Winnebago	Differential Aptitude Test	9
Winnebago	Iowa Test of Educational Development	9
Winnebago	Lorge-Thorndike Intelligence Test	9
Winnebago	Iowa Test of Educational Development	11
Winnebago	Preliminary Scholastic Aptitude	11
Winnebago	Minnesota Scholastic Aptitude	11
Winnebago	National Merit Scholarship Qualifying Test	11

Table X Cont.

Standardized Tests Used by Member Schools

<u>High School</u>	<u>Test</u>	<u>Grade</u>
Winnebago	American College Testing	12
Winnebago	Scholastic Aptitude Test	12
Bricelyn	Iowa Test of Educational Development	9
Bricelyn	Minnesota Scholastic Aptitude Test	11
Bricelyn	Preliminary Scholastic Aptitude	11
Bricelyn	National Merit Scholarship Qualifying Test	11
Bricelyn	Scholastic Aptitude Test	12
Bricelyn	American College Testing	12
Frost	Iowa Tests of Basic Skills	7 & 8
Frost	Iowa Test of Educational Development	9 & 11
Frost	Minnesota English Test	11
Frost	Minnesota Scholastic Aptitude Test	11
Frost	Lorge-Thorndike Intelligence Test	7
Frost	Preliminary Scholastic Aptitude	11
Frost	Minnesota Vocational Interest Inventory	12
Frost	Differential Aptitude Test	9

Guidance activities should include the placement of students, either in future educational training or in a job that matches their training. Along with this function, follow-up procedures and techniques are essential to facilitate the evaluation of graduates.

No formal guidance personnel are associated with the South Central Vocational Center. Member schools are responsible for testing students, and helping the parents and students make realistic vocational choices. Once a student enrolls at the Center, however, the individual instructors assume much of the guidance function. Each instructor is responsible for assisting his students as to job or future schooling placement.

Guidance involves orientation to the world of work. A Center activity designed to increase occupational awareness involved having visitors from industry talk with Center students to describe their occupation and answer questions concerning that occupation. In this way a secondary student had the chance to acquaint himself with an occupation of interest through interchange not available during regular class instruction. Table XI reveals that 34 visitors from industry discussed their occupation with Center enrollees during 1970-71.

Table XI

Visits by Industry Personnel to Discuss
Profession with Center Students

Center Program	Industry 1969-70	Visitors 1970-71
Automotives	2	4
Building Trades	-	8
Business Education	3	5
Electronics	1	1
Health Occupations	0	16

Recruitment might be classified as another guidance function. Open house events allowed residents the opportunity to observe the Center programs. To further expose prospective students to the Center, a formal orientation program was held. Each school sent tenth and eleventh grade students as a group to visit the Center. While there, the director presented a formal orientation to the group. Small groups then visited each instructional area where the program was explained in detail. At the end of the guided tour, each student had the opportunity to return to the area of greatest interest to learn more about that program from the instructor. This program involved 435 tenth and eleventh graders in 1970-71.

Meetings between Center staff and faculty members of participating schools provided an opportunity to coordinate instruction and improve articulation for students. During 1969-70, meetings were held at the Center involving those

Center and home school faculty members responsible for electronics, automotives, industrial arts, model office and business education programs. Similar meetings were held in 1970-71 which included the building trades instructor. In addition, industrial arts teachers from member schools met with the Center's automotives instructor to coordinate the small engine instruction program to be offered in participating schools. Industrial arts instructors also assumed the responsibility of teaching junior high students introductory electronics.

The Center maintains a follow-up record of their students. The status of 1969-70 Center graduates reveals that of 125 students enrolled in the 1969-70 school year, 97 were not available for employment in October 1970. Table XII indicates that this figure of 97 included 52 eleventh graders and 41 students who went on for further education. Of the 28 students who entered the labor market, 21 entered an occupation related to the Center program in which they were enrolled.

Table XII illustrates that the intentions for the 1970-71 Center enrollees are similar to the previous year's students. Of the 163 students enrolled in 1970-71, 29 planned to become employed, with 20 of those going into an occupation related to their Center program. Among those unavailable for employment, 54 were juniors and 68 planned to attend a post-secondary institution. Of those 68 continuing their education, 43 planned to receive post-secondary vocational training related to the Center program in which they were enrolled, and eight more planned to pursue a related education at a college or university.

Table XII

Follow-Up Information on Secondary Center Students

No. Enrolled in 1969-70 School Year
Program Title & Grade

Health		Bus.		Elect.		Auto		Total
11	12	11	12	11	12	11	12	
12	7	0	22	6	6	34	38	125

1970-71 Status

Employed									
Occupation related to Center programs in which enrolled		1	6		1	13	21		
Occupation unrelated to Center Programs in which enrolled		0	1		1	5	7		
Unavailable for Employment	12	6	15	6	4	34	20	97	
Further training related to Center program in which enrolled									
High School	12	0		6		34		52	
Post-Secondary		6	12		4		14	36	
Vocational			3					3	
College or University									
Unrelated to Center program in which enrolled							2	2	
Military							3	3	
Housewife									
Health Reasons									
Other							1	1	

TABLE XII CONT.

Follow-Up Information on Secondary Center Students

No. Enrolled during 1970-71 School Year
Program Title and Grade

Health		Bus.		Elect.		Auto		Carp.		Total
11	12	11	12	11	12	11	12	11	12	
7	8	11	24	4	17	26	42	6	19	164

1971-72 Intentions

Employed											
Occupation related to center program in which enrolled		4		5				10		1	20
Occupation unrelated to center program in which enrolled		-		1		1		5		2	9
Unavailable for Employment	7	4	11	18	4	16	26	27	6	16	135
Further training related to center program in which enrolled											
High School	7		11		4		26		6		54
Post-Secondary Voc.		1		12		7		13		10	43
College or University		3		1		2		1		1	8
Unrelated to center program in which enrolled				5		3		7		2	17
Military						4		6		3	13
Housewife											
Health Reasons											
Other											

A further illustration of new interest in post-secondary vocational training is revealed in Table XIII, which summarizes follow-up information on graduates of the member schools for the past three years. Table XIII shows that the percentage of graduates enrolled in area vocational-technical schools increased from 7% of the 1969 graduates to 12% of those graduating in 1970, and intentions of 1971 graduates show that 19% planned to enroll in an Area Vocational-Technical School in the fall.

When the number of graduates enrolled in AVTS is combined with those attending private vocational schools, the percentage pursuing vocational education almost doubled, rising from 12% in 1969 to 23% in 1971. The number employed or pursuing further vocational training increased from 29% of the 1969 graduates to 43% of those graduating in 1971.

Table XIII
Secondary Graduates Follow-Up Data for
Participating Schools 1969-1971

Status: Six Months Following Graduation	Year of Graduation					
	1969		1970		1971*	
	Number	%	Number	%	Number	%
Employed	52	17	57	20	61	20
AVTS	20	7	35	12	58	19
Private Vocational Education	14	5	16	5	13	4
Four-Year College (Public & Private)	136	45	127	42	111	39
Junior College	34	11	29	9.5	27	9
Training in Military	10	3	8	2.5	8	3
Institutionalized	4	1	2	.5	1	.3
Unemployed	6	2	4	1	2	.6
Other	24	8	23	7.5	16	5
Total Graduates	300		301		307	

* Intentions Planned

Graduates of Center programs have attended at least seven area vocational-technical schools in Minnesota, the most frequently attended being Mankato. Personnel from area schools are invited to visit the Center to actively "recruit"

students and provide information on their programs. Representatives from Mankato, Pipestone, and Staples Area Vocational-Technical Schools visited for this purpose during 1970-71.

If secondary vocational programs are of value to the enrollee, it should be possible for at least some graduates to attend an area vocational-technical school or private vocational school with advanced standing, thereby eliminating duplication of training. As secondary vocational programs strengthen and proliferate, articulation becomes a greater factor to be considered and solved. Some area schools do offer the possibility of attaining advanced standing in certain programs. Graduates of the South Central Vocational Center have found the following schools' programs offer advanced standing possibilities: 1) Mankato Area Vocational-Technical School--automotives, electronics, business; 2) Jackson Area Vocational-Technical School--carpentry, automotives; 3) Faribault Area Vocational-Technical School--carpentry.

Thirty-five Center students were assisted in enrolling in post-secondary vocational schools in 1969-70, while 43 were similarly assisted in 1970-71. This process involved group discussion among the students, director, and instructors. When prospective enrollees have been determined, students are encouraged to fill out applications and go through normal procedures prescribed by their schools. Center instructors write a letter to the post-secondary school involved explaining the students' participation at the Center and recommends acceptance of the application. If the instructor thinks the student is a good candidate for advanced placement, this idea is also suggested.

Each instructor handles job placement. Of thirty Center program graduates in 1970, fifteen were placed by Center personnel, with the other fifteen finding their own job. Vocational students enrolled in member high school programs are likewise eligible to use the Center placement service. No record has been kept concerning this aspect of the guidance program, however.

It is often the "less scholarly" students that enroll in vocational programs. This type of student often has a poor high school attendance record. During 1969-70 Center program participants had 95.5% attendance records, as compared to one of 96.2% of attendance for all students in the home high school. During the 1970-71 school year these

figures were: 1) 97% attendance for Center students, 2) 96.4% for all students.

Attendance is often a difficult item to assess. In areas where attendance rates exceed 95%, it may be difficult to show a significant change in attendance. Center personnel, however, reported a definite improvement in attitude among Center students, and this was reiterated by school personnel at member schools. Comments by students indicated that the opportunity provided by Center programs made them more eager to come to school; they felt their education was more meaningful.

A partial explanation of the excellent attendance records might be that Center programs were designed to involve students in activities related to classroom instruction. Each Center program has a simulated work setting or combination of simulated work setting and actual experiences as a part of the class. Perhaps the best example of this would be the business education program which utilizes a "model office concept" in its instructional facilities and organization. The classroom is patterned after a corporate office of a business located at Blue Earth. The first such use of this concept at the secondary level, this program involved forming an imaginary corporation with simulated real office transactions as part of the instruction.

Individual student needs must be considered in planning a program. Facilities such as that found in the business education program allow students to progress at individual rates. Secondary education must also provide for students with "special needs." Table XIV indicates that 44% of the students enrolled during 1969-70 school year were classified as students with special needs. In 1970-71, 46.5% of those enrolled were qualified as such.

Table XIV

Number of Special Needs Students Enrolled in
Vocational Programs, Including Disadvantaged

Program	No. Students Enrolled Year	
	1969-70	1970-71
Automotives	28	30
Building Trades	--	12
Business Education	15	17
Health Occupations	14	14
Electronics	6	3
Total Special Needs	63	76

Adult Programs

Secondary schools have the responsibility of serving adults. Because federal monies were not used specifically or extensively for adult vocational education programs at the Center, little mention has been made concerning the operation of adult programs. The Center has, however, offered numerous classes for members of the working force. During 1970-71 school year, eight adult evening school programs were offered through the Center. These programs which consisted of 10 three hour sessions per program, had a total enrollment of 126. Also, the on-going adult farm management program was in operation at this time. This program involved 80 adults in two sections each of which met as a group for 12 two hour sessions. On the farm visits supplemented this portion of the program. Enrollees in all adult programs were generally concerned with updating skills and abilities for use in their present occupation.

Although several manpower programs were applied for during 1970-71, none were approved or conducted at the Center.

Observations and Recommendations

Assisting Factors

The accomplishments of the South Central Vocational Center in Blue Earth can be attributed to several factors, among which are: 1) The availability of facilities; 2) The cooperation from other agencies, i.e., the Agriculture Extension Service in Blue Earth, the Blue Earth public school, school districts in the surrounding area; 3) The adequacy and use of publicity; 4) Community support; 5) Support (financial and otherwise) from external agencies such as the State Department of Education and U. S. Office of Education; and 6) The enthusiasm and dedication of those responsible for the Center's operation.

The availability of facilities allowed the Center to offer several programs at one location without expending funds for a building project. Such an arrangement permits experimentation at a minimal cost.

Facilities for the automotive program were made available by the Agricultural Extension Service in Blue Earth. Another building at the county fairgrounds is now being used for the Agri-mechanics program begun in 1971. Initial support for the Center is owed to the Blue Earth School District. Their wholehearted support allowed the Center concept to develop and grow.

Without the cooperation of the neighboring school districts, the Center concept would not have become a reality. Center success required many scheduling adjustments at participating schools to enable student attendance at Center programs. A willingness to financially support the Center on the basis of student enrollment was a key factor to making the Center program a successful one.

Participation by member schools is most encouraging, as shown in Table IV. For the 1971-72 school year, 215 students enrolled in six programs. Of this total, Blue Earth had 64, Bricelyn 19, Delavan 14, East Chain 23, Elmore 27, Frost 6, Granada-Huntley 32, and Winnebago 30.

Boys make up about 2/3 of total Center enrollment. In 1969-70, 59.4% of the enrollees were boys; in 1970-71, they made up 69.3% of total enrollment; in 1971-72, 68.4% of the

enrollment is male. To date, no girls have enrolled in automotives, electronics, building trades, or agri-business mechanics. Conversely, no boys have chosen to enroll in the health occupations program, while just two of the 115 enrollees in the business education program were male.

Automotives has proven to be the most popular course offered with business education the next most frequently chosen. Two courses have been added since 1969-70--building trades in 1970-71 and agri-business/mechanics in 1971-72. The Center is presently developing a media program to be available in 1972-73.

Public relations is important in establishing any new venture. The Center has had good coverage by the mass media and has made good use of the opportunity. A favorable attitude toward vocational education on the part of newspaper editors and radio and TV personnel has helped "sell the program" to the public by making them aware of developments.

Blue Earth's community has accepted the additional traffic and student movement connected with the on-the-job training involved in Center programs. An accepting community attitude has aided the Center's development. Business and industry has provided the assistance needed in cooperative training program, as well as employment opportunities that will keep local youth in their home communities.

"Outside" support has been useful and welcomed. The Minnesota State Board for Vocational Education, the Division of Vocational-Technical Education of the State Department of Education, and the U.S. Office of Education all assisted in planning and funding of the Center's operation. Such support helps in getting a new concept "off the ground."

No educational venture survives without much work and the dedicated endeavor of the personnel involved. Enthusiastic people supplied this assisting factor in the development of the Center. Their continued enthusiasm and dedication is vital to its operation.

Yet to be Accomplished

To reach all goals immediately would indicate minimal goal setting. Not all that was included in the proposal has been accomplished by the Center, but long strides have been made. Six programs are now established with one more

in the developmental stage. Enrollment has risen from 143 to 215 in two years. Adult programs and junior high programs, although not covered by this report, have been offered. Articulation between high school and post-secondary programs has been broached. Only one school within reasonable driving distance remains away from Center programs, and that school may soon join.

Other objectives the Center has accomplished include: 1) The Center programs have not eliminated previously established courses in participating schools; 2) Vocational program offerings available to secondary students have increased through the addition of new courses; 3) Junior high school students have been exposed to introductory pre-vocational offerings in electronics and small engines; 4) Additional students have enrolled in post-secondary vocational-technical schools; 5) Center faculty members have met with faculty of participating schools; 6) An adult farm management program has been started.

One of the major items that needs to be accomplished at the South Central Vocational Center concerns the guidance function. It would be of great value to have a center based guidance operation to coordinate guidance programs at member schools, to organize follow-up procedures, and to improve articulation between elementary, junior high, senior high, and post-secondary vocational programs.

Emphasis has been at the secondary level; it is now time to go both directions from that level in developing the Center's functions. As more students realize the value of vocational education, the mechanism for assisting them must be available. This could be most easily assisted by instituting a guidance function at the Center.

As evaluation becomes more of a by-word in education, adequate record keeping becomes more imperative. Centralized record keeping would serve several needs. The development of proper forms assists this chore. This, too, could be a function of the guidance program. Adequate record keeping on adult programs will become more important as greater numbers of adults return for updating and upgrading programs.

Other objectives which need additional attention are those concerned with manpower cooperation and the establishment of a multi-occupational cooperative education program. There needs to be a general improvement in the coordination

of educational programs with manpower needs to avoid unnecessary and costly duplication of educational services to society.

Factors Preventing Objective Achievement

Several factors have affected Center operation adversely. A major one is the cost of bus travel. When small schools have a long distance to send students and cannot share transportation, this becomes a large per student cost item. If this travel cost was reimbursed, at the same level regular busing costs are, a great share of this problem would be solved.

Scheduling outlying school students involved cooperation among several school personnel. Since attendance at the Center requires approximately three hours of time, a student's programs must be well scheduled to allow him to complete courses required for graduation. In small schools with limited course sections available, scheduling can be a great problem.

Additional schools increase the number of administrative personnel. Each time a change in administration occurs, administrative personnel at the Center have the added responsibility of informing these new people, and soliciting their cooperation.

Recommendations for Future Vocational Centers

Secondary vocational centers have made a good start in Minnesota with six centers approved by the State Board of Education and 23 centers to be approved in January, 1972. Those centers in operation have added programs not previously available to secondary school students. The South Central Vocational Center would seem to be doing its part in encouraging high school youth to pursue post-secondary vocational training if they do not seek employment upon graduation.

Centers not yet established should profit from the experience of the Blue Earth and Roseau Centers. Specifically, future centers should observe the following:

- 1) Allow adequate time to develop an overall plan for the Center. The tendency to act before completely evaluating their situation could be detrimental. Centers should not copy another

Center's program, but develop their own carefully and base it on manpower and student needs.

- 2) In order to provide adequate vocational offerings, there must be an adequate student base. Schools contemplating organization of a Center should survey the area to make sure there are enough students available for a minimum of seven courses. Overlap of vocational center attendance areas would defeat the purpose of which they were devised.
- 3) It is important that the community be involved in planning. Business organizations can provide input concerning manpower needs and provide the training stations needed for successful cooperative programs. Manpower and other government agencies need to be involved to assure coordination of programs which meet the needs of people.
- 4) A thorough discussion which involves the administrative personnel of all member schools is needed to assure cooperation in scheduling, and clarification of funding procedures.
- 5) Financing should be based on student enrollment in participating schools, not on participation in Center programs. This will assure fuller cooperation in scheduling and allow students a greater chance to benefit from Center offerings.
- 6) Articulation needs particular attention during the planning process. Elementary grade programs must be developed that will introduce students to the world of work. Junior high programs are needed that will be of greatest value to them during high school. And, if high school vocational programs are to be of benefit to students, it must be possible for superior students to attain advanced standing at post-secondary institutions. To assure this articulation at the post-secondary level involves vocational Center personnel explaining their programs to area school administrators and instructors. This should be done before Center graduates attempt to enroll in post-secondary schools.

- 7) Guidance personnel should be a part of every Center operation. This would assure that vocational testing and counseling is available and meaningful for all students. Job placement should be coordinated through the guidance department. A complete and adequate record keeping system on all Center enrollees (adult and secondary) should be a planned part of the guidance function.
- 8) Records for purposes of accountability, cost accounting, purpose for adult enrollments, etc. should be kept at the Center and coordinated through the Center.
- 9) Adult education programs involving all member schools should be coordinated through the Center. Records should indicate the status of enrollees at the time the program was undertaken and updated to reflect changes following completion of a course.

These suggestions are not exhaustive. However, based on the operation of the Blue Earth and Roseau Centers, it would seem they are valid suggestions which, if followed, should assist developing Centers in their planning and organizing process.

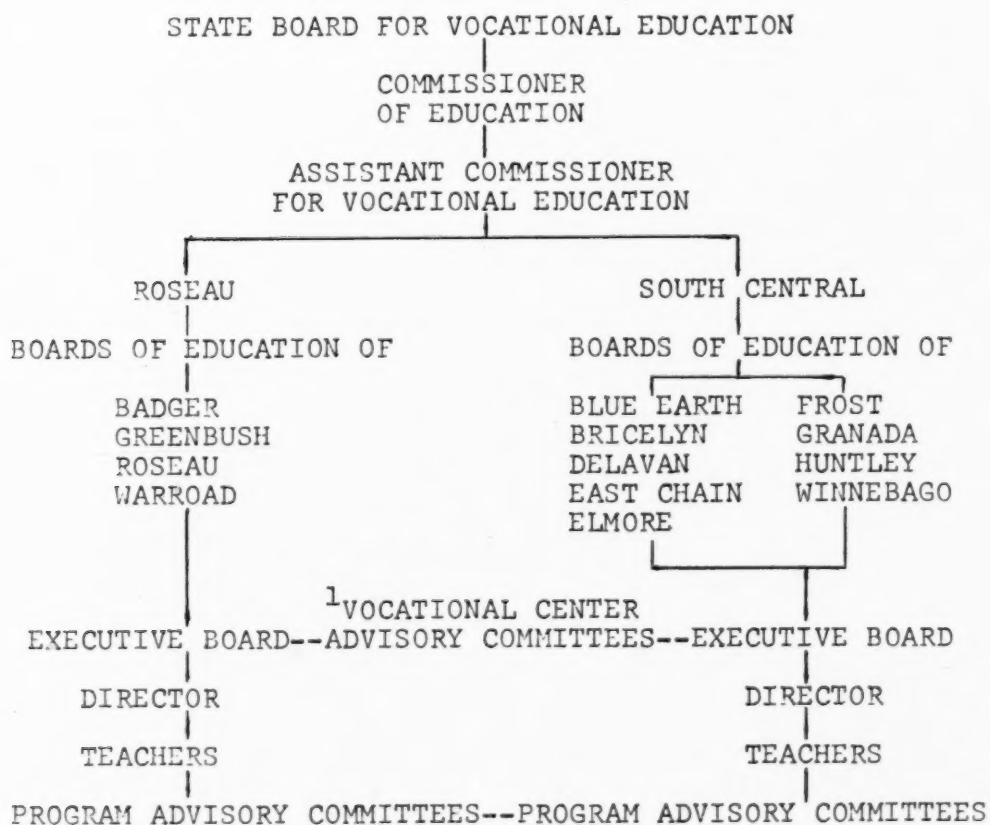
Secondary vocational centers promise to be of great value to students whose home high school cannot offer the programs they need and desire. Student numbers will continue to be a limiting factor in rural Minnesota high schools for years to come. Vocational education is needed by students in these schools. The vocational center concept would seem to be a good vehicle to provide this needed education.

Literature Cited

1. Copa, George H., "Minnesota's South Central Vocational Center--A Case Study", Minnesota State Department of Education: St. Paul, 1970
2. Domian, Otto E. and Olson, Manley E., "Education 1967, A Statewide Study of Elementary, Secondary, and Area Vocational-Technical Education in Minnesota", Bureau of Field Studies and Surveys, College of Education, University of Minnesota: Minneapolis, August, 1967.
3. Kodet, Leonard B., Anderson, Robert M., Hellekson, Joan M., Murphy, Harold J., Preston, Jane E., Olson, Genevieve, "Vocational Technical Education 1969--A Study of the Role and Function of Secondary Vocational Education in the State of Minnesota", Program Planning and Development Section, Division of Vocational-Technical Education, Minnesota State Department of Education: St. Paul, November, 1968.
4. Laws Relating to the Minnesota Public School System, Minnesota State Department of Education: St. Paul, 1965.
5. Miles, Guy H., "Amelioration of Critical Education Needs in Minnesota Through Innovative and Exemplary Programs", North Star Research and Development Institute: Minneapolis, June, 1969.
6. "Proposal for Exemplary Programs or Project in Vocational Education", Division of Vocational-Technical Education, Minnesota State Department of Education: St. Paul.

Appendix A - Administrative Relationships

The organizational chart below shows the administrative relationships in the local project locations:



¹ Each of the Centers has an overall advisory committee.

Appendix B - Questionnaire

List major events concerning operation of the center.

January - February, 1971--

March - April, 1971--

May - June, 1971--

July - September, 1971--

Center personnel--list any changes since January, 1971. Give name, position, years of occupational experience, years of teaching experience, highest level of education (include area of specialization), percent of time employed, and date joined the staff.

Describe dissemination activities, (from September, 1970 to September 30, 1971) itemize newspaper or magazine articles or other published materials used for information purposes or public relations. A copy of each item should be attached. Also list the number of visits to the Center by educators from other school districts.

Describe problems the Center had during implementation (i.e. transportation costs, transportation time, course scheduling, administrative). Explain solutions that have been attempted or are working. Include any departure in operation from original plan.

Briefly describe future activities which are planned in the following areas:

- a. Program expansion
- b. Guidance services
- c. Additional participants (schools)
- d. Other

Please list members of Center advisory committee

<u>Name</u>	<u>Position</u>	<u>Duration of Membership</u>
-------------	-----------------	-----------------------------------

Describe Center operation of 1970-71 school (July 1, 1970 - June 30, 1971) program using the following format:

<u>Program</u>	<u>No. Of Sections</u>	<u>No. Of Sessions/ Section</u>	<u>No. Of Hours/ Session</u>	<u>Total No. Of Students In Program</u>	<u>Cost*</u>
----------------	----------------------------	---	--------------------------------------	---	--------------

*The sum of costs over all programs should give the total costs of operating the Center. Program costs should include their share of supplies, travel, salary, utilities, rent, ancillary, and equipment costs (equipment costs should be depreciated over appropriate period of time).

Time (per day or week) high school students spend in transit.

<u>Name of School</u>	<u>Distance Traveled (in miles)</u>	<u>Time Required (one way)</u>
-----------------------	---	------------------------------------

School	Contribution to Operation		Total Current Operating Expenses of Member School		Local Expenditure for Center (exclusive of State, Federal \$)	
	1969-70	1970-71	1969-70	1970-71	1969-70	1970-71
	\$	\$	\$	\$	\$	\$

Adult Programs Offered

Program Title

	Farm Management							
	68-69	69-70	70-71	68-69	69-70	70-71	68-69	69-70
Number enrolled during school year								
Status when enrolled								
Unemployed								
Underemployed								
Updating								
Present Status								
Employed								
Occupations related to training								
Occupation unrelated to training								
Unemployed								
Unavailable for Employment								
Further training								
Related to program . . .								
Continued enrollment elsewhere								
Unrelated to program								
Military								
Housewife								
Health Reasons								
Other								

Number of special needs students enrolled in vocational programs (list program and number enrolled).

Program	No. Students Enrolled		
	1968-69	1969-70	1970-71

Number of students enrolled or assisted under Tutor-Tutee program during 1970-71.

School	Number Enrolled in Program

Number of students placed in a shop for on-the-job training or simulated work experience program during 1970-71 school year.

Program	Number Enrolled	No. Placed in Coop or OJT Program	No. Worked In Simulated Setting

What is your definition of a cooperative vocational program?

Number of tenth grade students evaluated for interests and abilities (aptitudes).

School	No. of Students Tested for Interest		No. Students Tested for Ability	
	1969-70	1970-71	1969-70	1970-71

Instrument(s) used to assess interest _____
 Instrument(s) used to assess ability _____

Absenteeism rate for vocational center enrollees

No. of days	}	9	10	11	12
Absent during		1967-68			
		1968-69			
School year		1969-70			
		1970-71			

Absenteeism rate for regular school program students--give as % or number of days absent by grade as given above for vocational center enrollees.

Number of industry visitors who visited the school or Center to describe their occupation:

<u>Industry Represented</u>	Number of Visitors		
	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>

Number of individual conferences held between guidance personnel and, (a) high school students, (b) high school students' parents:

No. Conferences Held

	Guidance Personnel and Student	Guidance Personnel and Parents
1969-70		
1970-71		

Do you conduct a formal orientation program for your students?
 Yes _____ No _____ If yes, how many students were involved
 _____. Please describe this program:

Do you provide job placement service for Center graduates?
Yes _____ No _____. If yes, how many students were placed:
Class of 1969-70 _____; 1970-71 _____.

Are vocational students enrolled in regular high school
programs eligible to use the Center's placement service?
Yes _____ No _____. If yes, how many have used it?
Number 1969-70 _____; 1970-71 _____.

Comments: _____

Describe whatever follow-up procedures, (a) you now have in
operation, and (b) you plan to use in the future.

Number of students placed on job at completion of Center
program:

	<u>1969-70</u>	<u>1970-71</u>
No. students completed program		
Present status		
No. unemployed or unavailable		
No. employed		
Placed by Center personnel		
Found own job		

Number of meetings held between Center staff and faculty of
participating member schools:

<u>Year</u>	<u>Topic or Purpose of Meeting</u>
-------------	------------------------------------

Youth group participation. Indicate the number of Center students participating in youth groups connected with program courses, i.e., FFA for agriculture course.

Youth Group

School	DECA							
	69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71

Youth group participation at member schools, including participants enrolled in Center programs for three years.

Youth Group

School	DECA								
	68-69	69-70	70-71	68-69	69-70	70-71	68-69	69-70	70-71

Follow-Up of School Graduates of Member Schools for
19__ to 19__ School Year

School	Total Enrollment Grades 9-12	Total Vocational Enrollment Grades 9-12	Number of Dropouts	
			Total 9-12	Vocational Education 9-12

List the post-secondary area vocational-technical schools which graduates of the Center program have attended.

Area School	Number Attending		
	1969-70	1970-71	1971-72

Do the area vocational-technical schools attended by Center graduates allow advances standing for courses taken in your Center? Yes _____ No _____. If yes, what courses allow advanced standing, and how many students attained advanced standing?

AVTS Program Title	No. Attaining Advanced Standing		
	1969-70	1970-71	1971-72

Number of representatives of area vocational-technical schools that have appeared at the vocational Center for the purpose of speaking to students.

<u>AVTS Represented</u>	<u>Date of Appearance</u>	<u>Purpose of Appearance</u>

Describe methods used to assist Center students in enrolling in post-secondary vocational schools. How many were assisted in 1969-70_____ and 1970-71_____.

Number of manpower programs conducted at/or arranged for by vocational center.

Program Title	Number Enrolled	
	1969-70	1970-71

Program output to meet manpower needs.

Program	Expected Yearly Output	Anticipated Yearly Manpower Needs	
		New	Replacement

Number of CAMPS meetings held at/or arranged for by vocational center

1969-70 _____ 1970-71 _____

Manpower agency representation on advisory committee(s).

1969-70 1970-71

Number of advisory committee meetings held

Number of manpower personnel on committee

Extent of Program Implementation by Center for 19____ (including summer)

[illegible]

Extent of Program Implementation by Center for 19 (including summer)
List Programs Offered--Distinguish Between Level and Where Program was Offered.

[illegible]

Junior High Programs (grade 9 and 10)

	Program Title and Grade Enrolled											
	Electronics											
	9	10	9	10	9	10	9	10	9	10	9	10
No. enrolled in 1969-70 school year												
1970-71 Status for these students												
Took more vocational training												
Did not take more vocational training												
Were in school												
Dropped out of school												
No. enrolled in 1970-71 school year												
Plans for (1971-72) school year												
Plan to take more vocational training												
Do not plan to take more vocational training												
Enrolled in school												
Have dropped out												

19__ to 19__ School Year
Senior High Programs (Grade 11 and 12)

	Program Title and Grade Enrolled					
	Nursing					
	11	12	11	12	11	12
Number enrolled in 19__ to 19__ school year . . .						
19__ to 19__ Status						
Employed						
Occupation related to center program in which enrolled						
Occupation unrelated to center program in which enrolled						
Unemployed - but available						
Unavailable for employment						
Further training related to center program in which enrolled						
High School						
Post-Secondary Vocational . .						
College or University						
Unrelated to center program in which enrolled						
Military						
Housewife						
Health Reasons						
Other						